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(54) Title: BISPECIFIC ANTIBODIES THAT BIND TO NKP46 AND MICA/B

(57) Abstract: Provided herein are anti-NKp46 × anti-MICA/B antibodies and methods of using such antibodies for the treatment of MICA/B-associated cancers, as well as anti-NKp46 × anti-B7H3 antibodies.

BISPECIFIC ANTIBODIES THAT BIND TO NKP46 AND MICA/B

CROSS-REFERENCE

[0001] This application claims priority to U.S. Provisional Application No. 63/590,925, filed on October 17, 2023, U.S. Provisional Application No. 63/594,672, filed on October 31, 2023, and U.S. Provisional Application No. 63/610,815, filed on December 15, 2023, which are incorporated herein by reference in their entirety.

BACKGROUND

[0002] Antibody-based therapeutics have been used successfully to treat a variety of diseases, including cancer. An increasingly prevalent avenue being explored is the engineering of single immunoglobulin molecules that co-engage two different antigens. Such alternate antibody formats that engage two different antigens are often referred to as bispecific antibodies. Because the considerable diversity of the antibody variable region (Fv) makes it possible to produce an Fv that recognizes virtually any molecule, the typical approach to bispecific antibody generation is the introduction of new variable regions into the antibody.

[0003] Natural killer cell engagers (NKEs), a new class of immune-oncology therapeutics, contain fragments of antibodies such as antibody binding domains and are designed to exploit the immune functions of NK cells in cancer.

[0004] NK cells are part of the innate immune system and represent 5-20% of circulating lymphocytes in humans. NK cells infiltrate virtually all tissues and were originally characterized by their ability to kill tumor cells effectively without the need for prior sensitization. This ability to infiltrate also occurs in the tumor microenvironment and this infiltration is associated with better overall survival in patients.

[0005] Activated NK cells kill target cells by means similar to cytotoxic T cells, using cytolytic granules as well as through death receptor pathways. When NK cells encounter foreign or cancer cells, they are activated via there activating receptors, including NKp46. Thus, similar to "T Cell Engagers" (TCEs), that bind to CD3 on T Cells and a tumor antigen on a tumor cell to drive cytotoxic killing of the tumor cell, Natural Killer Engagers (NKEs) can be made that bind to the

NK cells and a tumor cell and similarly facilitate cytotoxic killing.

[0006] Natural killer group 2 member D (NKG2D) is an activating receptor present on the surface of natural killer (NK) cells, some NK T cells, CD8+ cytotoxic T cells, γδ T cells, and CD4+ T cells, under certain conditions. (Champsaur M, Lanier L L. Immunol Rev 2010; 235:267-85; Jamieson A M, Diefenbach A, McMahon C W, et al. Immunity 2002; 17:19-29). MICA and MICB (MICA/B) are NKG2D ligands which can, in some instances, be upregulated in several human cancers. Further MICA/B are transmembrane proteins with MHC-like extracellular domains that do not associate with beta-2 microglobulin nor present antigens. The proteins can undergo proteolytic cleavage in a multistep process and thereafter, the soluble MICA/B can bind NKG2D on NK cells. In some cases, the soluble MICA/B is shed in the blood plasma and serum in subjects with cancer.

[0007] The present disclosure is directed to improved bispecific MICA/B and NKp46 antibodies and the use of such antibodies for use in therapy (e.g., cancer therapy).

SUMMARY

[0008] In one aspect, the present disclosure provides a MICA/B antigen binding domain comprising a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID

NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3

and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7

[MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, and (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, as depicted in Figure 21.

[0009] In another aspect, the present disclosure provides a MICA/B antigen binding domain comprising a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5

[MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ

ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, and (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, as depicted in Figure 21.

[0010] In another aspect, the present disclosure provides an antibody comprising a MICA/B antigen binding domain (as described above).

[0011] In a further embodiment and in accordance with the above, the antibody is a monoclonal antibody or a bispecific antibody.

[0012] In another aspect, the present disclosure provides a composition comprising a MICA/B antigen binding domain or an antibody (as described above).

[0013] In another aspect, the present disclosure provides a nucleic acid composition comprising: (a) a first nucleic acid encoding a variable heavy domain (as described above), and (b) a second

nucleic acid encoding a variable light domain (as described above).

[0014] In another aspect, the present disclosure provides an expression vector composition comprising: (a) a first expression vector comprising a first nucleic acid (as described above), and (b) a second expression vector comprising a second nucleic acid (as described above).

[0015] In another aspect, the present disclosure provides a host cell comprising an expression vector composition (as described above).

[0016] In another aspect, the present disclosure provides a method of making a MICA/B antigen binding domain or an antibody comprising such, the method comprising: (a) culturing a host cell (as described above) under conditions wherein the MICA/B antigen binding domain or the antibody comprising such is expressed, and (b) recovering the MICA/B antigen binding domain or the antibody comprising such.

[0017] In another aspect, the present disclosure provides a NKp46 antigen binding domain comprising a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group including: SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, as depicted in Figure 23.

[0018] In another aspect, the present disclosure provides a NKp46 antigen binding domain comprising a variable heavy domain and variable light domain pair selected from the group including: SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, as depicted in Figure 23.

[0019] In another aspect, the present disclosure provides an antibody comprising a NKp46 antigen binding domain (as described above).

[0020] In a further embodiment and in accordance with the above, the antibody is a monoclonal antibody or a bispecific antibody.

[0021] In another aspect, the present disclosure provides a composition comprising a NKp46 antigen binding domain or an antibody (as described above).

[0022] In another aspect, the present disclosure provides a nucleic acid composition comprising: (a) a first nucleic acid encoding a variable heavy domain (as described above), and (b) a second

nucleic acid encoding a variable light domain (as described above).

[0023] In another aspect, the present disclosure provides an expression vector composition comprising: (a) a first expression vector comprising a first nucleic acid (as described above), and (b) a second expression vector comprising a second nucleic acid (as described above).

[0024] In another aspect, the present disclosure provides a host cell comprising an expression vector composition (as described above).

[0025] In another aspect, the present disclosure provides a method of making a NKp46 antigen binding domain or an antibody comprising such, the method comprising: (a) culturing a host cell (as described above) under conditions wherein the NKp46 antigen binding domain or the antibody comprising such is expressed, and (b) recovering the NKp46 antigen binding domain or the antibody comprising such.

[0026] In another aspect, the present disclosure provides a heterodimeric antibody, comprising: (a) a first monomer, comprising: (i) an anti-NKp46 scFv comprising a first variable heavy VH1 domain, an scFv linker, and a first variable light VL1 domain; and (ii) a first Fc domain, wherein the scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker; (b) a second monomer comprising a VH2-CH1-hinge-CH2-CH3 monomer, wherein VH2 is a second variable heavy domain and CH2-CH3 is a second Fc domain; and (c) a light chain comprising a second variable light VL2 domain, wherein the second variable heavy VH2 domain and the second variable light VL2 domain form a MICA/B antigen binding domain.

[0027] In a further embodiment and in accordance with the above, the MICA/B antigen binding domain comprises a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3

and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3

and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6

[MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted

in Figures 21 and 22.

[0028] In a further embodiment and in accordance with any of the above, the MICA/B antigen binding domain comprises a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7

[MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX

and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

[0029] In a further embodiment and in accordance with any of the above, the anti-NKp46 scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a first variable heavy VH1 domain and first variable light VL1 domain pair selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0030] In a further embodiment and in accordance with any of the above, the anti-NKp46 scFv comprises a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0031] In a further embodiment and in accordance with any of the above, the first variable light VL1 domain of the anti-NKp46 scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker, or the first variable heavy VH1 domain of the anti-NKp46 scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker.

[0032] In a further embodiment and in accordance with any of the above, the heterodimeric antibody comprises a first amino acid sequence, a second amino acid sequence, and a third amino acid sequence, wherein the first, second, and third amino acid sequences are selected from the group including: (i) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP46810, (ii) the amino acid sequences of SEQ ID NOS: XXX-XXX of XENP46811, and (iii) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP46812, as depicted in Figure 31.

[0033] In a further embodiment and in accordance with any of the above, the scFv linker is a charged scFv linker.

[0034] In a further embodiment and in accordance with the above, the scFv linker is a charged scFv linker having the amino acid sequence $(GKPGS)_4$ (SEQ ID NO: XXX).

[0035] In a further embodiment and in accordance with any of the above, the first and second Fc domains are each variant Fc domains.

[0036] In a further embodiment and in accordance with the above, the first and/or second variant Fc domains comprise one or more FcγRIIIA (CD16a) binding variant substitutions.

[0037] In a further embodiment and in accordance with the above, the one or more FcγRIIIA (CD16a) binding variant substitutions are selected from the group including: (i) 236A, (ii) 239D, (iii) 239E, (iv) 243L, (v) 298A, (vi) 299T, (vii) 332E, (viii) 332D, (ix) 239D/332E, (x) 236A/332E, (xi) 239D/332E/330L, and (xii) 332E/330L, wherein numbering is according to EU numbering.

[0038] In a further embodiment and in accordance with the above, the first and second variant Fc domains comprise a set of FcγRIIIA (CD16a) binding variant substitutions selected from the group including: (i) S239D/I332E : S239D/I332E, (ii) S239D : S239D, (iii) I332E : I332E, (iv) WT : S239D/I332E, (v) WT : S239D, (vi) WT : I332E, (vii) S239D/I332E : WT, (viii) S239D : WT, (ix) I332E : WT, (x) S239D/I332E : S239D, (xi) S239D/I332E : I332E, (xii) S239D : S239D/I332E, (xiii) I332E : S239D/I332E, (xiv) S239D : I332E, and (xv) I332E : S239D, wherein numbering is according to EU numbering.

[0039] In a further embodiment and in accordance with any of the above, the first and/or second variant Fc domains comprise the FcγRIIIA (CD16a) binding variant substitutions of S239D/I332E, wherein numbering is according to EU numbering.

[0040] In a further embodiment and in accordance with any of the above, the first and second variant Fc domains comprise a set of heterodimerization variants selected from the group including those depicted in Figures 4A-4F, wherein numbering is according to EU numbering.

[0041] In a further embodiment and in accordance with the above, the set of heterodimerization variants is selected from the group including: (i) S364K/E357Q : L368D/K370S, (ii) S364K : L368D/K370S, (iii) S364K : L368E/K370S, (iv) D401K : T411E/K360E/Q362E, and (v) T366W

: T366S/L368A/Y407V, wherein numbering is according to EU numbering.

[0042] In a further embodiment and in accordance with any of the above, the first and second variant Fc domains further comprise one or more ablation variants.

[0043] In a further embodiment and in accordance with the above, the one or more ablation variants are E233P/L234V/L235A/G236del/S267K, wherein numbering is according to EU numbering.

[0044] In a further embodiment and in accordance with any of the above, one of the first or second variant Fc domain comprises one or more pI variants.

[0045] In a further embodiment and in accordance with the above, the one or more pI variants are N208D/Q295E/N384D/Q418E/N421D, wherein numbering is according to EU numbering.

[0046] In a further embodiment and in accordance with any of the above, the first monomer comprises amino acid variants S364K/E357Q/E233P/L234V/L235A/G236del/S267K, wherein the second monomer comprises amino acid variants L368D/K370S/N208D/Q295E/N384D/Q418E/N421D/E233P/L234V/L235A/G236del/S267K, and wherein numbering is according to EU numbering.

[0047] In a further embodiment and in accordance with any of the above, the first and second monomers each further comprise amino acid variants M428L/N434S, M428L/434A, or M252Y/S254T/T256E, wherein numbering is according to EU numbering.

[0048] In another aspect, a nucleic acid composition comprising nucleic acids encoding the first and second monomers and the light chain of the antibody (as described above) is provided.

[0049] In another aspect, an expression vector comprising the nucleic acids (as described above) is provided.

[0050] In another aspect, a host cell transformed with the expression vector (as described above) is provided.

[0051] In another aspect, a method of making a heterodimeric antibody is provided, the method comprising: (a) culturing the host cell (as described above) under conditions wherein the heterodimeric antibody is expressed, and (b) recovering the heterodimeric antibody.

[0052] In another aspect, the present disclosure provides a heterodimeric antibody, comprising:

(a) a first monomer, comprising: (i) an anti-MICA/B scFv comprising a first variable heavy VH1 domain, an scFv linker, and a first variable light VL1 domain; and (ii) a first Fc domain, wherein the scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker; (b) a second monomer comprising a VH2-CH1-hinge-CH2-CH3 monomer, wherein VH2 is a second variable heavy domain and CH2-CH3 is a second Fc domain; and (c) a light chain comprising a second variable light VL2 domain, wherein the second variable heavy VH2 domain and the second variable light VL2 domain form a NKp46 antigen binding domain.

[0053] In a further embodiment and in accordance with the above, the NKp46 antigen binding domain comprises a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0054] In a further embodiment and in accordance with any of the above, the NKp46 antigen binding domain comprises a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0055] In a further embodiment and in accordance with any of the above, the anti-MICA/B scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a first variable heavy VH1 domain and first variable light VL1 domain pair selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3

and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3

and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6

[MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted

in Figures 21 and 22.

[0056] In a further embodiment and in accordance with any of the above, the anti-MICA/B scFv comprises a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7

[MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX

and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

[0057] In a further embodiment and in accordance with any of the above, the first variable light VL1 domain of the anti-MICA/B scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker, or the first variable heavy VH1 domain of the anti-MICA/B scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker.

[0058] In a further embodiment and in accordance with any of the above, the scFv linker is a charged scFv linker.

[0059] In a further embodiment and in accordance with the above, the scFv linker is a charged scFv linker having the amino acid sequence $(GKPGS)_4$ (SEQ ID NO: XXX).

[0060] In a further embodiment and in accordance with any of the above, the first and second Fc domains are each variant Fc domains.

[0061] In a further embodiment and in accordance with the above, the first and/or second variant Fc domains comprise one or more FcγRIIIA (CD16a) binding variant substitutions.

[0062] In a further embodiment and in accordance with the above, the one or more FcγRIIIA (CD16a) binding variant substitutions are selected from the group including: (i) 236A, (ii) 239D, (iii) 239E, (iv) 243L, (v) 298A, (vi) 299T, (vii) 332E, (viii) 332D, (ix) 239D/332E, (x) 236A/332E, (xi) 239D/332E/330L, and (xii) 332E/330L, wherein numbering is according to EU numbering.

[0063] In a further embodiment and in accordance with the above, the first and second variant Fc domains comprise a set of FcγRIIIA (CD16a) binding variant substitutions selected from the group including: (i) S239D/I332E : S239D/I332E, (ii) S239D : S239D, (iii) I332E : I332E, (iv) WT : S239D/I332E, (v) WT : S239D, (vi) WT : I332E, (vii) S239D/I332E : WT, (viii) S239D :

WT, (ix) I332E : WT, (x) S239D/I332E : S239D, (xi) S239D/I332E : I332E, (xii) S239D : S239D/I332E, (xiii) I332E : S239D/I332E, (xiv) S239D : I332E, and (xv) I332E : S239D, wherein numbering is according to EU numbering.

[0064] In a further embodiment and in accordance with any of the above, the first and/or second variant Fc domains comprise the FcγRIIIA (CD16a) binding variant substitutions of S239D/I332E, wherein numbering is according to EU numbering.

[0065] In a further embodiment and in accordance with any of the above, the first and second variant Fc domains comprise a set of heterodimerization variants selected from the group including those depicted in Figures 4A-4F, wherein numbering is according to EU numbering.

[0066] In a further embodiment and in accordance with the above, the set of heterodimerization variants is selected from the group including: (i) S364K/E357Q : L368D/K370S, (ii) S364K : L368D/K370S, (iii) S364K : L368E/K370S, (iv) D401K : T411E/K360E/Q362E, and (v) T366W : T366S/L368A/Y407V, wherein numbering is according to EU numbering.

[0067] In a further embodiment and in accordance with any of the above, the first and second variant Fc domains further comprise one or more ablation variants.

[0068] In a further embodiment and in accordance with the above, the one or more ablation variants are E233P/L234V/L235A/G236del/S267K, wherein numbering is according to EU numbering.

[0069] In a further embodiment and in accordance with any of the above, one of the first or second variant Fc domain comprises one or more pI variants.

[0070] In a further embodiment and in accordance with the above, the one or more pI variants are N208D/Q295E/N384D/Q418E/N421D, wherein numbering is according to EU numbering.

[0071] In a further embodiment and in accordance with any of the above, the first monomer comprises amino acid variants S364K/E357Q/E233P/L234V/L235A/G236del/S267K, wherein the second monomer comprises amino acid variants L368D/K370S/N208D/Q295E/N384D/Q418E/N421D/E233P/L234V/L235A/G236del/S267K, and wherein numbering is according to EU numbering.

[0072] In a further embodiment and in accordance with any of the above, the first and second

monomers each further comprise amino acid variants M428L/N434S, M428L/434A, or M252Y/S254T/T256E, wherein numbering is according to EU numbering.

[0073] In another aspect, a nucleic acid composition comprising nucleic acids encoding the first and second monomers and the light chain of the antibody (as described above) is provided.

[0074] In another aspect, an expression vector comprising the nucleic acids (as described above) is provided.

[0075] In another aspect, a host cell transformed with the expression vector (as described above) is provided.

[0076] In another aspect, a method of making a heterodimeric antibody is provided, the method comprising: (a) culturing the host cell (as described above) under conditions wherein the heterodimeric antibody is expressed, and (b) recovering the heterodimeric antibody.

[0077] In another aspect, a method of making a heterodimeric antibody is provided, the method comprising: (a) culturing the host cell (as described above) under conditions wherein the heterodimeric antibody is expressed, and (b) recovering the heterodimeric antibody.

[0078] In another aspect, the present disclosure provides a heterodimeric antibody, comprising: (a) a first monomer comprising, from N-terminus to C-terminus, a VH1-CH1-[first optional domain linker]-scFv-[second optional domain linker]-CH2-CH3, wherein VH1 is a first variable heavy VH1 domain, scFv is an anti-MICA/B scFv, and CH2-CH3 is a first Fc domain; (b) a second monomer comprising, from N-terminus to C-terminus, a CH2-CH3, wherein the CH2-CH3 is a second Fc domain; and (c) a light chain comprising, from N-terminus to C-terminus, a VL1-CL, wherein VL1 is a first variable light VH1 domain and CL is a constant light domain, wherein: (i) the first variable heavy VH1 domain and the first variable light VL1 domain form a NKp46 antigen binding domain, (ii) the anti-MICA/B scFv comprises a second variable heavy VH2 domain, a scFv linker, and a second variable light VL2 domain, and (iii) the anti-MICA/B scFv is covalently attached between the C-terminus of the CH1 domain and the N-terminus of the first Fc domain.

[0079] In a further embodiment and in accordance with the above, the NKp46 antigen binding domain comprises a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3

and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0080] In a further embodiment and in accordance with any of the above, the NKp46 antigen binding domain comprises a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0081] In a further embodiment and in accordance with any of the above, the anti-MICA/B scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3

and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7

[MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX

for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

[0082] In a further embodiment and in accordance with any of the above, the anti-MICA/B scFv comprises a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and

XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and

XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

[0083] In a further embodiment and in accordance with any of the above, wherein: (i) the anti-MICA/B scFv comprises, from N-terminus to C-terminus, VH2-scFv linker-VL2, (ii) the variable heavy domain is covalently attached to the C-terminus of the CH1 domain, optionally

using a first domain linker, and (iii) the variable light domain is covalently attached to the N-terminus of the first Fc domain, optionally using a second domain linker; or (i) the anti-MICA/B scFv comprises, from N-terminus to C-terminus, VL2-scFv linker-VH2, (ii) the variable light domain is covalently attached to the C-terminus of the CH1 domain, optionally using a first domain linker, and (iii) the variable heavy domain is covalently attached to the N-terminus of the first Fc domain, optionally using a second domain linker.

[0084] In a further embodiment and in accordance with any of the above, the heterodimeric antibody comprises a first amino acid sequence, a second amino acid sequence, and a third amino acid sequence, wherein the first, second, and third amino acid sequences are selected from the group including: (i) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP47274, and (ii) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP47281, as depicted in Figure 32.

[0085] In a further embodiment and in accordance with any of the above, the scFv linker is a charged scFv linker.

[0086] In a further embodiment and in accordance with the above, the scFv linker is a charged scFv linker having the amino acid sequence $(GKPGS)_4$ (SEQ ID NO: XXX).

[0087] In a further embodiment and in accordance with any of the above, the first and second Fc domains are each variant Fc domains.

[0088] In a further embodiment and in accordance with the above, the first and/or second variant Fc domains comprise one or more FcγRIIIA (CD16a) binding variant substitutions.

[0089] In a further embodiment and in accordance with the above, the one or more FcγRIIIA (CD16a) binding variant substitutions are selected from the group including: (i) 236A, (ii) 239D, (iii) 239E, (iv) 243L, (v) 298A, (vi) 299T, (vii) 332E, (viii) 332D, (ix) 239D/332E, (x) 236A/332E, (xi) 239D/332E/330L, and (xii) 332E/330L, wherein numbering is according to EU numbering.

[0090] In a further embodiment and in accordance with the above, the first and second variant Fc domains comprise a set of FcγRIIIA (CD16a) binding variant substitutions selected from the group including: (i) S239D/I332E : S239D/I332E, (ii) S239D : S239D, (iii) I332E : I332E, (iv) WT : S239D/I332E, (v) WT : S239D, (vi) WT : I332E, (vii) S239D/I332E : WT, (viii) S239D :

WT, (ix) I332E : WT, (x) S239D/I332E : S239D, (xi) S239D/I332E : I332E, (xii) S239D : S239D/I332E, (xiii) I332E : S239D/I332E, (xiv) S239D : I332E, and (xv) I332E : S239D, wherein numbering is according to EU numbering.

[0091] In a further embodiment and in accordance with any of the above, the first and/or second variant Fc domains comprise the FcγRIIIA (CD16a) binding variant substitutions of S239D/I332E, wherein numbering is according to EU numbering.

[0092] In a further embodiment and in accordance with any of the above, the first and second variant Fc domains comprise a set of heterodimerization variants selected from the group including those depicted in Figures 4A-4F, wherein numbering is according to EU numbering.

[0093] In a further embodiment and in accordance with the above, the set of heterodimerization variants is selected from the group including: (i) S364K/E357Q : L368D/K370S, (ii) S364K : L368D/K370S, (iii) S364K : L368E/K370S, (iv) D401K : T411E/K360E/Q362E, and (v) T366W : T366S/L368A/Y407V, wherein numbering is according to EU numbering.

[0094] In a further embodiment and in accordance with any of the above, the first and second variant Fc domains further comprise one or more ablation variants.

[0095] In a further embodiment and in accordance with the above, the one or more ablation variants are E233P/L234V/L235A/G236del/S267K, wherein numbering is according to EU numbering.

[0096] In a further embodiment and in accordance with any of the above, one of the first or second variant Fc domain comprises one or more pI variants.

[0097] In a further embodiment and in accordance with the above, the one or more pI variants are N208D/Q295E/N384D/Q418E/N421D, wherein numbering is according to EU numbering.

[0098] In a further embodiment and in accordance with any of the above, the first monomer comprises amino acid variants S364K/E357Q/E233P/L234V/L235A/G236del/S267K, wherein the second monomer comprises amino acid variants L368D/K370S/N208D/Q295E/N384D/Q418E/N421D/E233P/L234V/L235A/G236del/S267K, and wherein numbering is according to EU numbering.

[0099] In a further embodiment and in accordance with any of the above, the first and second

monomers each further comprise amino acid variants M428L/N434S, M428L/434A, or M252Y/S254T/T256E, wherein numbering is according to EU numbering.

[0100] In another aspect, a nucleic acid composition comprising nucleic acids encoding the first and second monomers and the light chain of the antibody (as described above) is provided.

[0101] In another aspect, an expression vector comprising the nucleic acids (as described above) is provided.

[0102] In another aspect, a host cell transformed with the expression vector (as described above) is provided.

[0103] In another aspect, a method of making a heterodimeric antibody is provided, the method comprising: (a) culturing the host cell (as described above) under conditions wherein the heterodimeric antibody is expressed, and (b) recovering the heterodimeric antibody.

[0104] In another aspect, a method of making a heterodimeric antibody is provided, the method comprising: (a) culturing the host cell (as described above) under conditions wherein the heterodimeric antibody is expressed, and (b) recovering the heterodimeric antibody.

[0105] In another aspect, the present disclosure provides a heterodimeric antibody, comprising: (a) a first monomer comprising, from N-terminus to C-terminus, a VH1-CH1-[first optional domain linker]-scFv-[second optional domain linker]-CH2-CH3, wherein VH1 is a first variable heavy VH1 domain, scFv is an anti-NKp46 scFv, and CH2-CH3 is a first Fc domain; (b) a second monomer comprising, from N-terminus to C-terminus, a CH2-CH3, wherein the CH2-CH3 is a second Fc domain; and (c) a light chain comprising, from N-terminus to C-terminus, a VL1-CL, wherein VL1 is a first variable light VH1 domain and CL is a constant light domain, wherein: (i) the first variable heavy VH1 domain and the first variable light VL1 domain form a MICA/B antigen binding domain, (ii) the anti-NKp46 scFv comprises a second variable heavy VH2 domain, a scFv linker, and a second variable light VL2 domain, and (iii) the anti-NKp46 scFv is covalently attached between the C-terminus of the CH1 domain and the N-terminus of the first Fc domain.

[0106] In a further embodiment and in accordance with the above, the MICA/B antigen binding domain comprises a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3

and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for

vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID

NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8

[MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

[0107] In a further embodiment and in accordance with any of the above, the MICA/B antigen binding domain comprises a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7

[MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0,

(xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

[0108] In a further embodiment and in accordance with any of the above, the anti-NKp46 scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0109] In a further embodiment and in accordance with any of the above, the anti-NKp46 scFv comprises a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0110] In a further embodiment and in accordance with any of the above, wherein: (i) the anti-NKp46 scFv comprises, from N-terminus to C-terminus, VH2-scFv linker-VL2, (ii) the variable

heavy domain is covalently attached to the C-terminus of the CH1 domain, optionally using a first domain linker, and (iii) the variable light domain is covalently attached to the N-terminus of the first Fc domain, optionally using a second domain linker; or (i) the anti-NKp46 scFv comprises, from N-terminus to C-terminus, VL2-scFv linker-VH2, (ii) the variable light domain is covalently attached to the C-terminus of the CH1 domain, optionally using a first domain linker, and (iii) the variable heavy domain is covalently attached to the N-terminus of the first Fc domain, optionally using a second domain linker.

[0111] In a further embodiment and in accordance with any of the above, the scFv linker is a charged scFv linker.

[0112] In a further embodiment and in accordance with the above, the scFv linker is a charged scFv linker having the amino acid sequence $(GKPGS)_4$ (SEQ ID NO: XXX).

[0113] In a further embodiment and in accordance with any of the above, the first and second Fc domains are each variant Fc domains.

[0114] In a further embodiment and in accordance with the above, the first and/or second variant Fc domains comprise one or more FcγRIIIA (CD16a) binding variant substitutions.

[0115] In a further embodiment and in accordance with the above, the one or more FcγRIIIA (CD16a) binding variant substitutions are selected from the group including: (i) 236A, (ii) 239D, (iii) 239E, (iv) 243L, (v) 298A, (vi) 299T, (vii) 332E, (viii) 332D, (ix) 239D/332E, (x) 236A/332E, (xi) 239D/332E/330L, and (xii) 332E/330L, wherein numbering is according to EU numbering.

[0116] In a further embodiment and in accordance with the above, the first and second variant Fc domains comprise a set of FcγRIIIA (CD16a) binding variant substitutions selected from the group including: (i) S239D/I332E : S239D/I332E, (ii) S239D : S239D, (iii) I332E : I332E, (iv) WT : S239D/I332E, (v) WT : S239D, (vi) WT : I332E, (vii) S239D/I332E : WT, (viii) S239D : WT, (ix) I332E : WT, (x) S239D/I332E : S239D, (xi) S239D/I332E : I332E, (xii) S239D : S239D/I332E, (xiii) I332E : S239D/I332E, (xiv) S239D : I332E, and (xv) I332E : S239D, wherein numbering is according to EU numbering.

[0117] In a further embodiment and in accordance with any of the above, the first and/or second variant Fc domains comprise the FcγRIIIA (CD16a) binding variant substitutions of

S239D/I332E, wherein numbering is according to EU numbering.

[0118] In a further embodiment and in accordance with any of the above, the first and second variant Fc domains comprise a set of heterodimerization variants selected from the group including those depicted in Figures 4A-4F, wherein numbering is according to EU numbering.

[0119] In a further embodiment and in accordance with the above, the set of heterodimerization variants is selected from the group including: (i) S364K/E357Q : L368D/K370S, (ii) S364K : L368D/K370S, (iii) S364K : L368E/K370S, (iv) D401K : T411E/K360E/Q362E, and (v) T366W : T366S/L368A/Y407V, wherein numbering is according to EU numbering.

[0120] In a further embodiment and in accordance with any of the above, the first and second variant Fc domains further comprise one or more ablation variants.

[0121] In a further embodiment and in accordance with the above, the one or more ablation variants are E233P/L234V/L235A/G236del/S267K, wherein numbering is according to EU numbering.

[0122] In a further embodiment and in accordance with any of the above, one of the first or second variant Fc domain comprises one or more pI variants.

[0123] In a further embodiment and in accordance with the above, the one or more pI variants are N208D/Q295E/N384D/Q418E/N421D, wherein numbering is according to EU numbering.

[0124] In a further embodiment and in accordance with any of the above, the first monomer comprises amino acid variants S364K/E357Q/E233P/L234V/L235A/G236del/S267K, wherein the second monomer comprises amino acid variants L368D/K370S/N208D/Q295E/N384D/Q418E/N421D/E233P/L234V/L235A/G236del/S267K, and wherein numbering is according to EU numbering.

[0125] In a further embodiment and in accordance with any of the above, the first and second monomers each further comprise amino acid variants M428L/N434S, M428L/434A, or M252Y/S254T/T256E, wherein numbering is according to EU numbering.

[0126] In another aspect, a nucleic acid composition comprising nucleic acids encoding the first and second monomers and the light chain of the antibody (as described above) is provided.

[0127] In another aspect, an expression vector comprising the nucleic acids (as described above)

is provided.

[0128] In another aspect, a host cell transformed with the expression vector (as described above) is provided.

[0129] In another aspect, a method of making a heterodimeric antibody is provided, the method comprising: (a) culturing the host cell (as described above) under conditions wherein the heterodimeric antibody is expressed, and (b) recovering the heterodimeric antibody.

[0130] In another aspect, a method of making a heterodimeric antibody is provided, the method comprising: (a) culturing the host cell (as described above) under conditions wherein the heterodimeric antibody is expressed, and (b) recovering the heterodimeric antibody.

[0131] In another aspect, the present disclosure provides a heterodimeric antibody, comprising: (a) a first monomer comprising, from N-terminus to C-terminus, a VH1-CH1-first linker-scFv-second linker-CH2-CH3, wherein the VH1 is a first variable heavy domain, the scFv is an anti-NKp46 scFv, and the CH2-CH3 is a first Fc domain; (b) a second monomer comprising, from N-terminus to C-terminus, a VH2-CH1-hinge-CH2-CH3, wherein the VH2 is a second variable heavy domain and the CH2-CH3 is a second Fc domain; and (c) a common light chain comprising, from N-terminus to C-terminus, a VL-CL, wherein: (i) the VL is a variable light domain and the CL is a light chain constant domain, (ii) the first variable heavy VH1 domain and the variable light VL domain form a first MICA/B antigen binding domain, and (iii) the second variably heavy VH2 domain and the variable light VL domain form a second MICA/B antigen binding domain.

[0132] In a further embodiment and in accordance with the above, the first and/or second MICA/B antigen binding domains comprise a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1

[MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7

[MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-

3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and

SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

[0133] In a further embodiment and in accordance with any of the above, the first and/or second MICA/B antigen binding domains comprise a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2,

(xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and

XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

[0134] In a further embodiment and in accordance with any of the above, the anti-NKp46 scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a first variable heavy VH1 domain and a first variable light VL1 domain pair selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0135] In a further embodiment and in accordance with any of the above, the anti-NKp46 scFv comprises a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0136] In a further embodiment and in accordance with any of the above, the variable light domain of the anti-NKp46 scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker, or the variable heavy domain of the anti-NKp46 scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker.

[0137] In a further embodiment and in accordance with any of the above, the heterodimeric antibody comprises a first amino acid sequence, a second amino acid sequence, and a third amino acid sequence, wherein the first, second, and third amino acid sequences are selected from the group including: (i) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP47438, and (ii) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP47439, as depicted in

Figure 33.

[0138] In a further embodiment and in accordance with any of the above, the scFv linker is a charged scFv linker.

[0139] In a further embodiment and in accordance with the above, the scFv linker is a charged scFv linker having the amino acid sequence $(GKPGS)_4$ (SEQ ID NO: XXX).

[0140] In a further embodiment and in accordance with any of the above, the first and second Fc domains are each variant Fc domains.

[0141] In a further embodiment and in accordance with the above, the first and/or second variant Fc domains comprise one or more FcγRIIIA (CD16a) binding variant substitutions.

[0142] In a further embodiment and in accordance with the above, the one or more FcγRIIIA (CD16a) binding variant substitutions are selected from the group including: (i) 236A, (ii) 239D, (iii) 239E, (iv) 243L, (v) 298A, (vi) 299T, (vii) 332E, (viii) 332D, (ix) 239D/332E, (x) 236A/332E, (xi) 239D/332E/330L, and (xii) 332E/330L, wherein numbering is according to EU numbering.

[0143] In a further embodiment and in accordance with the above, the first and second variant Fc domains comprise a set of FcγRIIIA (CD16a) binding variant substitutions selected from the group including: (i) S239D/I332E : S239D/I332E, (ii) S239D : S239D, (iii) I332E : I332E, (iv) WT : S239D/I332E, (v) WT : S239D, (vi) WT : I332E, (vii) S239D/I332E : WT, (viii) S239D : WT, (ix) I332E : WT, (x) S239D/I332E : S239D, (xi) S239D/I332E : I332E, (xii) S239D : S239D/I332E, (xiii) I332E : S239D/I332E, (xiv) S239D : I332E, and (xv) I332E : S239D, wherein numbering is according to EU numbering.

[0144] In a further embodiment and in accordance with any of the above, the first and/or second variant Fc domains comprise the FcγRIIIA (CD16a) binding variant substitutions of S239D/I332E, wherein numbering is according to EU numbering.

[0145] In a further embodiment and in accordance with any of the above, the first and second variant Fc domains comprise a set of heterodimerization variants selected from the group including those depicted in Figures 4A-4F, wherein numbering is according to EU numbering.

[0146] In a further embodiment and in accordance with the above, the set of heterodimerization

variants is selected from the group including: (i) S364K/E357Q : L368D/K370S, (ii) S364K : L368D/K370S, (iii) S364K : L368E/K370S, (iv) D401K : T411E/K360E/Q362E, and (v) T366W : T366S/L368A/Y407V, wherein numbering is according to EU numbering.

[0147] In a further embodiment and in accordance with any of the above, the first and second variant Fc domains further comprise one or more ablation variants.

[0148] In a further embodiment and in accordance with the above, the one or more ablation variants are E233P/L234V/L235A/G236del/S267K, wherein numbering is according to EU numbering.

[0149] In a further embodiment and in accordance with any of the above, one of the first or second variant Fc domain comprises one or more pI variants.

[0150] In a further embodiment and in accordance with the above, the one or more pI variants are N208D/Q295E/N384D/Q418E/N421D, wherein numbering is according to EU numbering.

[0151] In a further embodiment and in accordance with any of the above, the first monomer comprises amino acid variants S364K/E357Q/E233P/L234V/L235A/G236del/S267K, wherein the second monomer comprises amino acid variants L368D/K370S/N208D/Q295E/N384D/Q418E/N421D/E233P/L234V/L235A/G236del/S267K, and wherein numbering is according to EU numbering.

[0152] In a further embodiment and in accordance with any of the above, the first and second monomers each further comprise amino acid variants M428L/N434S, M428L/434A, or M252Y/S254T/T256E, wherein numbering is according to EU numbering.

[0153] In another aspect, a nucleic acid composition comprising nucleic acids encoding the first and second monomers and the light chain of the antibody (as described above) is provided.

[0154] In another aspect, an expression vector comprising the nucleic acids (as described above) is provided.

[0155] In another aspect, a host cell transformed with the expression vector (as described above) is provided.

[0156] In another aspect, a method of making a heterodimeric antibody is provided, the method comprising: (a) culturing the host cell (as described above) under conditions wherein the

heterodimeric antibody is expressed, and (b) recovering the heterodimeric antibody.

[0157] In another aspect, a method of making a heterodimeric antibody is provided, the method comprising: (a) culturing the host cell (as described above) under conditions wherein the heterodimeric antibody is expressed, and (b) recovering the heterodimeric antibody.

[0158] In another aspect, the present disclosure provides a heterodimeric antibody, comprising: (a) a first monomer comprising, from N-terminus to C-terminus, a VH1-CH1-first linker-scFv-second linker-CH2-CH3, wherein the VH1 is a first variable heavy domain, the scFv is an anti-MICA/B scFv, and the CH2-CH3 is a first Fc domain; (b) a second monomer comprising, from N-terminus to C-terminus, a VH2-CH1-hinge-CH2-CH3, wherein the VH2 is a second variable heavy domain and the CH2-CH3 is a second Fc domain; and (c) a common light chain comprising, from N-terminus to C-terminus, a VL-CL, wherein: (i) the VL is a variable light domain and the CL is a light chain constant domain, (ii) the first variable heavy VH1 domain and the variable light VL domain form a first NKp46 antigen binding domain, and (iii) the second variably heavy VH2 domain and the variable light VL domain form a second NKp46 antigen binding domain.

[0159] In a further embodiment and in accordance with the above, the first and/or second NKp46 antigen binding domains comprise a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0160] In a further embodiment and in accordance with any of the above, the first and/or second NKp46 antigen binding domains comprise a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0161] In a further embodiment and in accordance with any of the above, the anti-MICA/B scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a first variable heavy VH1 domain and a first variable light VL1 domain pair selected from the group including: (i) SEQ ID NOs: XXX-XXX

for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for

vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID

NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8

[MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

[0162] In a further embodiment and in accordance with any of the above, the anti-MICA/B scFv comprises a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7

[MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0,

(xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

[0163] In a further embodiment and in accordance with any of the above, the variable light domain of the anti-MICA/B scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker, or the variable heavy domain of the anti-MICA/B scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker.

[0164] In a further embodiment and in accordance with any of the above, the scFv linker is a charged scFv linker.

[0165] In a further embodiment and in accordance with the above, the scFv linker is a charged scFv linker having the amino acid sequence $(GKPGS)_4$ (SEQ ID NO: XXX).

[0166] In a further embodiment and in accordance with any of the above, the first and second Fc domains are each variant Fc domains.

[0167] In a further embodiment and in accordance with the above, the first and/or second variant Fc domains comprise one or more FcγRIIIA (CD16a) binding variant substitutions.

[0168] In a further embodiment and in accordance with the above, the one or more FcγRIIIA

(CD16a) binding variant substitutions are selected from the group including: (i) 236A, (ii) 239D, (iii) 239E, (iv) 243L, (v) 298A, (vi) 299T, (vii) 332E, (viii) 332D, (ix) 239D/332E, (x) 236A/332E, (xi) 239D/332E/330L, and (xii) 332E/330L, wherein numbering is according to EU numbering.

[0169] In a further embodiment and in accordance with the above, the first and second variant Fc domains comprise a set of FcγRIIIA (CD16a) binding variant substitutions selected from the group including: (i) S239D/I332E : S239D/I332E, (ii) S239D : S239D, (iii) I332E : I332E, (iv) WT : S239D/I332E, (v) WT : S239D, (vi) WT : I332E, (vii) S239D/I332E : WT, (viii) S239D : WT, (ix) I332E : WT, (x) S239D/I332E : S239D, (xi) S239D/I332E : I332E, (xii) S239D : S239D/I332E, (xiii) I332E : S239D/I332E, (xiv) S239D : I332E, and (xv) I332E : S239D, wherein numbering is according to EU numbering.

[0170] In a further embodiment and in accordance with any of the above, the first and/or second variant Fc domains comprise the FcγRIIIA (CD16a) binding variant substitutions of S239D/I332E, wherein numbering is according to EU numbering.

[0171] In a further embodiment and in accordance with any of the above, the first and second variant Fc domains comprise a set of heterodimerization variants selected from the group including those depicted in Figures 4A-4F, wherein numbering is according to EU numbering.

[0172] In a further embodiment and in accordance with the above, the set of heterodimerization variants is selected from the group including: (i) S364K/E357Q : L368D/K370S, (ii) S364K : L368D/K370S, (iii) S364K : L368E/K370S, (iv) D401K : T411E/K360E/Q362E, and (v) T366W : T366S/L368A/Y407V, wherein numbering is according to EU numbering.

[0173] In a further embodiment and in accordance with any of the above, the first and second variant Fc domains further comprise one or more ablation variants.

[0174] In a further embodiment and in accordance with the above, the one or more ablation variants are E233P/L234V/L235A/G236del/S267K, wherein numbering is according to EU numbering.

[0175] In a further embodiment and in accordance with any of the above, one of the first or second variant Fc domain comprises one or more pI variants.

[0176] In a further embodiment and in accordance with the above, the one or more pI variants

are N208D/Q295E/N384D/Q418E/N421D, wherein numbering is according to EU numbering.

[0177] In a further embodiment and in accordance with any of the above, the first monomer comprises amino acid variants S364K/E357Q/E233P/L234V/L235A/G236del/S267K, wherein the second monomer comprises amino acid variants L368D/K370S/N208D/Q295E/N384D/Q418E/N421D/E233P/L234V/L235A/G236del/S267K, and wherein numbering is according to EU numbering.

[0178] In a further embodiment and in accordance with any of the above, the first and second monomers each further comprise amino acid variants M428L/N434S, M428L/434A, or M252Y/S254T/T256E, wherein numbering is according to EU numbering.

[0179] In another aspect, a nucleic acid composition comprising nucleic acids encoding the first and second monomers and the light chain of the antibody (as described above) is provided.

[0180] In another aspect, an expression vector comprising the nucleic acids (as described above) is provided.

[0181] In another aspect, a host cell transformed with the expression vector (as described above) is provided.

[0182] In another aspect, a method of making a heterodimeric antibody is provided, the method comprising: (a) culturing the host cell (as described above) under conditions wherein the heterodimeric antibody is expressed, and (b) recovering the heterodimeric antibody.

[0183] In another aspect, a method of making a heterodimeric antibody is provided, the method comprising: (a) culturing the host cell (as described above) under conditions wherein the heterodimeric antibody is expressed, and (b) recovering the heterodimeric antibody.

[0184] In another aspect, the present disclosure provides a heterodimeric antibody, comprising: (a) a first monomer comprising, from N-terminus to C-terminus, a VH1-CH1-hinge-first linker-VH1-CH1-hinge-CH2-CH3, wherein VH1 is a first variable heavy domain and CH2-CH3 is a first Fc domain; (b) a light chain comprising, from N-terminus to C-terminus, a VL1-CL, wherein VL1 is a first variable light domain and CL is a constant light domain, and wherein the VH1 and VL1 form MICA/B antigen binding domains; and (c) a second monomer comprising, from N-terminus to C-terminus, an anti-NKp46 scFv and a second Fc domain, wherein the scFv is covalently attached to the N-terminus of the second Fc domain using a domain linker.

[0185] In a further embodiment and in accordance with the above, the anti-NKp46 scFv comprises a second variable heavy VH2 domain, an scFv linker, and a second variable light VL2 domain.

[0186] In a further embodiment and in accordance with any of the above, the anti-NKp46 scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0187] In a further embodiment and in accordance with any of the above, the anti-NKp46 scFv comprises a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0188] In a further embodiment and in accordance with any of the above, each of the MICA/B antigen binding domains comprise a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair, wherein the set of vhCDR1-3 and vlCDR1-3 is selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5

[MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7

[MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3

and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

[0189] In a further embodiment and in accordance with any of the above, each of the MICA/B antigen binding domains comprise a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1

[MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos:

XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX

and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

[0190] In a further embodiment and in accordance with any of the above, the heterodimeric antibody comprises a first amino acid sequence, a second amino acid sequence, and a third amino acid sequence, wherein the first, second, and third amino acid sequences are selected from the group including: (i) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP47442, and (ii) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP47443, as depicted in Figure 34.

[0191] In a further embodiment and in accordance with any of the above, the scFv linker is a charged scFv linker.

[0192] In a further embodiment and in accordance with the above, the scFv linker is a charged scFv linker having the amino acid sequence $(GKPGS)_4$ (SEQ ID NO: XXX).

[0193] In a further embodiment and in accordance with any of the above, the first and second linkers are each domain linkers.

[0194] In a further embodiment and in accordance with any of the above, the first and second Fc domains are each variant Fc domains.

[0195] In a further embodiment and in accordance with the above, the first and/or second variant Fc domains comprise one or more FcγRIIIA (CD16a) binding variant substitutions.

[0196] In a further embodiment and in accordance with the above, the one or more FcγRIIIA (CD16a) binding variant substitutions are selected from the group including: (i) 236A, (ii) 239D, (iii) 239E, (iv) 243L, (v) 298A, (vi) 299T, (vii) 332E, (viii) 332D, (ix) 239D/332E, (x) 236A/332E, (xi) 239D/332E/330L, and (xii) 332E/330L, wherein numbering is according to EU numbering.

[0197] In a further embodiment and in accordance with the above, the first and second variant Fc domains comprise a set of FcγRIIIA (CD16a) binding variant substitutions selected from the group including: (i) S239D/I332E : S239D/I332E, (ii) S239D : S239D, (iii) I332E : I332E, (iv) WT : S239D/I332E, (v) WT : S239D, (vi) WT : I332E, (vii) S239D/I332E : WT, (viii) S239D :

WT, (ix) I332E : WT, (x) S239D/I332E : S239D, (xi) S239D/I332E : I332E, (xii) S239D : S239D/I332E, (xiii) I332E : S239D/I332E, (xiv) S239D : I332E, and (xv) I332E : S239D, wherein numbering is according to EU numbering.

[0198] In a further embodiment and in accordance with any of the above, the first and/or second variant Fc domains comprise the FcγRIIIA (CD16a) binding variant substitutions of S239D/I332E, wherein numbering is according to EU numbering.

[0199] In a further embodiment and in accordance with any of the above, the first and second variant Fc domains comprise a set of heterodimerization variants selected from the group including those depicted in Figures 4A-4F, wherein numbering is according to EU numbering.

[0200] In a further embodiment and in accordance with the above, the set of heterodimerization variants is selected from the group including: (i) S364K/E357Q : L368D/K370S, (ii) S364K : L368D/K370S, (iii) S364K : L368E/K370S, (iv) D401K : T411E/K360E/Q362E, and (v) T366W : T366S/L368A/Y407V, wherein numbering is according to EU numbering.

[0201] In a further embodiment and in accordance with any of the above, the first and second variant Fc domains further comprise one or more ablation variants.

[0202] In a further embodiment and in accordance with the above, the one or more ablation variants are E233P/L234V/L235A/G236del/S267K, wherein numbering is according to EU numbering.

[0203] In a further embodiment and in accordance with any of the above, one of the first or second variant Fc domain comprises one or more pI variants.

[0204] In a further embodiment and in accordance with the above, the one or more pI variants are N208D/Q295E/N384D/Q418E/N421D, wherein numbering is according to EU numbering.

[0205] In a further embodiment and in accordance with any of the above, the first monomer comprises amino acid variants S364K/E357Q/E233P/L234V/L235A/G236del/S267K, wherein the second monomer comprises amino acid variants L368D/K370S/N208D/Q295E/N384D/Q418E/N421D/E233P/L234V/L235A/G236del/S267K, and wherein numbering is according to EU numbering.

[0206] In a further embodiment and in accordance with any of the above, the first and second

monomers each further comprise amino acid variants M428L/N434S, M428L/434A, or M252Y/S254T/T256E, wherein numbering is according to EU numbering.

[0207] In another aspect, a nucleic acid composition comprising nucleic acids encoding the first and second monomers and the light chain of the antibody (as described above) is provided.

[0208] In another aspect, an expression vector comprising the nucleic acids (as described above) is provided.

[0209] In another aspect, a host cell transformed with the expression vector (as described above) is provided.

[0210] In another aspect, a method of making a heterodimeric antibody is provided, the method comprising: (a) culturing the host cell (as described above) under conditions wherein the heterodimeric antibody is expressed, and (b) recovering the heterodimeric antibody.

[0211] In another aspect, a method of making a heterodimeric antibody is provided, the method comprising: (a) culturing the host cell (as described above) under conditions wherein the heterodimeric antibody is expressed, and (b) recovering the heterodimeric antibody.

[0212] In another aspect, the present disclosure provides a heterodimeric antibody, comprising: (a) a first monomer comprising, from N-terminus to C-terminus, a VH1-CH1-hinge-first linker-VH1-CH1-hinge-CH2-CH3, wherein VH1 is a first variable heavy domain and CH2-CH3 is a first Fc domain; (b) a light chain comprising, from N-terminus to C-terminus, a VL1-CL, wherein VL1 is a first variable light domain and CL is a constant light domain, and wherein the VH1 and VL1 form NKp46 antigen binding domains; and (c) a second monomer comprising, from N-terminus to C-terminus, an anti-MICA/B scFv and a second Fc domain, wherein the scFv is covalently attached to the N-terminus of the second Fc domain using a second linker.

[0213] In a further embodiment and in accordance with the above, the anti-MICA/B scFv comprises a second variable heavy VH2 domain, an scFv linker, and a second variable light VL2 domain.

[0214] In a further embodiment and in accordance with any of the above, the anti-MICA/B scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1

[MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7

[MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3

and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ

ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

[0215] In a further embodiment and in accordance with any of the above, the anti-MICA/B scFv comprises a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for

D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9

[MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

[0216] In a further embodiment and in accordance with any of the above, each of the NKp46 antigen binding domains comprise a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair, wherein the set of vhCDR1-3 and vlCDR1-3 is selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0217] In a further embodiment and in accordance with any of the above, each of the NKp46 antigen binding domains comprise a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0218] In a further embodiment and in accordance with any of the above, the scFv linker is a charged scFv linker.

[0219] In a further embodiment and in accordance with the above, the scFv linker is a charged scFv linker having the amino acid sequence $(GKPGS)_4$ (SEQ ID NO: XXX).

[0220] In a further embodiment and in accordance with any of the above, the first and second linkers are each domain linkers.

[0221] In a further embodiment and in accordance with any of the above, the first and second Fc domains are each variant Fc domains.

[0222] In a further embodiment and in accordance with the above, the first and/or second variant Fc domains comprise one or more FcγRIIIA (CD16a) binding variant substitutions.

[0223] In a further embodiment and in accordance with the above, the one or more FcγRIIIA (CD16a) binding variant substitutions are selected from the group including: (i) 236A, (ii) 239D, (iii) 239E, (iv) 243L, (v) 298A, (vi) 299T, (vii) 332E, (viii) 332D, (ix) 239D/332E, (x) 236A/332E, (xi) 239D/332E/330L, and (xii) 332E/330L, wherein numbering is according to EU numbering.

[0224] In a further embodiment and in accordance with the above, the first and second variant Fc domains comprise a set of FcγRIIIA (CD16a) binding variant substitutions selected from the group including: (i) S239D/I332E : S239D/I332E, (ii) S239D : S239D, (iii) I332E : I332E, (iv) WT : S239D/I332E, (v) WT : S239D, (vi) WT : I332E, (vii) S239D/I332E : WT, (viii) S239D : WT, (ix) I332E : WT, (x) S239D/I332E : S239D, (xi) S239D/I332E : I332E, (xii) S239D : S239D/I332E, (xiii) I332E : S239D/I332E, (xiv) S239D : I332E, and (xv) I332E : S239D, wherein numbering is according to EU numbering.

[0225] In a further embodiment and in accordance with any of the above, the first and/or second variant Fc domains comprise the FcγRIIIA (CD16a) binding variant substitutions of S239D/I332E, wherein numbering is according to EU numbering.

[0226] In a further embodiment and in accordance with any of the above, the first and second variant Fc domains comprise a set of heterodimerization variants selected from the group including those depicted in Figures 4A-4F, wherein numbering is according to EU numbering.

[0227] In a further embodiment and in accordance with the above, the set of heterodimerization variants is selected from the group including: (i) S364K/E357Q : L368D/K370S, (ii) S364K : L368D/K370S, (iii) S364K : L368E/K370S, (iv) D401K : T411E/K360E/Q362E, and (v) T366W : T366S/L368A/Y407V, wherein numbering is according to EU numbering.

[0228] In a further embodiment and in accordance with any of the above, the first and second

variant Fc domains further comprise one or more ablation variants.

[0229] In a further embodiment and in accordance with the above, the one or more ablation variants are E233P/L234V/L235A/G236del/S267K, wherein numbering is according to EU numbering.

[0230] In a further embodiment and in accordance with any of the above, one of the first or second variant Fc domain comprises one or more pI variants.

[0231] In a further embodiment and in accordance with the above, the one or more pI variants are N208D/Q295E/N384D/Q418E/N421D, wherein numbering is according to EU numbering.

[0232] In a further embodiment and in accordance with any of the above, the first monomer comprises amino acid variants S364K/E357Q/E233P/L234V/L235A/G236del/S267K, wherein the second monomer comprises amino acid variants L368D/K370S/N208D/Q295E/N384D/Q418E/N421D/E233P/L234V/L235A/G236del/S267K, and wherein numbering is according to EU numbering.

[0233] In a further embodiment and in accordance with any of the above, the first and second monomers each further comprise amino acid variants M428L/N434S, M428L/434A, or M252Y/S254T/T256E, wherein numbering is according to EU numbering.

[0234] In another aspect, a nucleic acid composition comprising nucleic acids encoding the first and second monomers and the light chain of the antibody (as described above) is provided.

[0235] In another aspect, an expression vector comprising the nucleic acids (as described above) is provided.

[0236] In another aspect, a host cell transformed with the expression vector (as described above) is provided.

[0237] In another aspect, a method of making a heterodimeric antibody is provided, the method comprising: (a) culturing the host cell (as described above) under conditions wherein the heterodimeric antibody is expressed, and (b) recovering the heterodimeric antibody.

[0238] In another aspect, a method of making a heterodimeric antibody is provided, the method comprising: (a) culturing the host cell (as described above) under conditions wherein the heterodimeric antibody is expressed, and (b) recovering the heterodimeric antibody.

[0239] In another aspect, the present disclosure provides a heterodimeric antibody, comprising: (a) a first monomer comprising, from N-terminus to C-terminus, a VH1-CH1-hinge-CH2-CH3-domain linker-scFv, wherein VH1 is a first variable heavy domain, scFv is an anti-NKp46 scFv, and CH2-CH3 is a first Fc domain; (b) a second monomer comprising, from N-terminus to C-terminus, a VH2-CH1-hinge-CH2-CH3, wherein CH2-CH3 is a second Fc domain; and (c) a light chain comprising, from N-terminus to C-terminus, a VL1-CL, wherein VL1 is a first variable light domain and CL is a constant light domain, wherein: (i) the VH1 and the VL1 form a first MICA/B antigen binding domain, (ii) the VH2 domain and the VL1 form a second MICA/B antigen binding domain, and (iii) the anti-NKp46 scFv comprises a VH3 domain, a scFv linker, and a VL2 domain.

[0240] In a further embodiment and in accordance with the above, the first and/or second MICA/B antigen binding domains comprise a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12

[MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3

and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9

[MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

[0241] In a further embodiment and in accordance with any of the above, the first and/or second MICA/B antigen binding domains comprise a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID

Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for

D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

[0242] In a further embodiment and in accordance with any of the above, the anti-NKp46 scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a first variable heavy chain VH1 domain and

first variable light chain VL1 domain pair selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0243] In a further embodiment and in accordance with any of the above, the anti-NKp46 scFv comprises a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0244] In a further embodiment and in accordance with any of the above, the variable light domain of the anti-NKp46 scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker, or the variable heavy domain of the anti-NKp46 scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker.

[0245] In a further embodiment and in accordance with any of the above, the heterodimeric antibody comprises a first amino acid sequence, a second amino acid sequence, and a third amino acid sequence, wherein the first, second, and third amino acid sequences are selected from the group including: (i) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP47446, and (ii) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP47447, as depicted in Figure 35.

[0246] In a further embodiment and in accordance with any of the above, the scFv linker is a charged scFv linker.

[0247] In a further embodiment and in accordance with the above, the scFv linker is a charged scFv linker having the amino acid sequence $(GKPGS)_4$ (SEQ ID NO: XXX).

[0248] In a further embodiment and in accordance with any of the above, the first and second Fc domains are each variant Fc domains.

[0249] In a further embodiment and in accordance with the above, the first and/or second variant Fc domains comprise one or more FcγRIIIA (CD16a) binding variant substitutions.

[0250] In a further embodiment and in accordance with the above, the one or more FcγRIIIA

(CD16a) binding variant substitutions are selected from the group including: (i) 236A, (ii) 239D, (iii) 239E, (iv) 243L, (v) 298A, (vi) 299T, (vii) 332E, (viii) 332D, (ix) 239D/332E, (x) 236A/332E, (xi) 239D/332E/330L, and (xii) 332E/330L, wherein numbering is according to EU numbering.

[0251] In a further embodiment and in accordance with the above, the first and second variant Fc domains comprise a set of FcγRIIIA (CD16a) binding variant substitutions selected from the group including: (i) S239D/I332E : S239D/I332E, (ii) S239D : S239D, (iii) I332E : I332E, (iv) WT : S239D/I332E, (v) WT : S239D, (vi) WT : I332E, (vii) S239D/I332E : WT, (viii) S239D : WT, (ix) I332E : WT, (x) S239D/I332E : S239D, (xi) S239D/I332E : I332E, (xii) S239D : S239D/I332E, (xiii) I332E : S239D/I332E, (xiv) S239D : I332E, and (xv) I332E : S239D, wherein numbering is according to EU numbering.

[0252] In a further embodiment and in accordance with any of the above, the first and/or second variant Fc domains comprise the FcγRIIIA (CD16a) binding variant substitutions of S239D/I332E, wherein numbering is according to EU numbering.

[0253] In a further embodiment and in accordance with any of the above, the first and second variant Fc domains comprise a set of heterodimerization variants selected from the group including those depicted in Figures 4A-4F, wherein numbering is according to EU numbering.

[0254] In a further embodiment and in accordance with the above, the set of heterodimerization variants is selected from the group including: (i) S364K/E357Q : L368D/K370S, (ii) S364K : L368D/K370S, (iii) S364K : L368E/K370S, (iv) D401K : T411E/K360E/Q362E, and (v) T366W : T366S/L368A/Y407V, wherein numbering is according to EU numbering.

[0255] In a further embodiment and in accordance with any of the above, the first and second variant Fc domains further comprise one or more ablation variants.

[0256] In a further embodiment and in accordance with the above, the one or more ablation variants are E233P/L234V/L235A/G236del/S267K, wherein numbering is according to EU numbering.

[0257] In a further embodiment and in accordance with any of the above, one of the first or second variant Fc domain comprises one or more pI variants.

[0258] In a further embodiment and in accordance with the above, the one or more pI variants

are N208D/Q295E/N384D/Q418E/N421D, wherein numbering is according to EU numbering.

[0259] In a further embodiment and in accordance with any of the above, the first monomer comprises amino acid variants S364K/E357Q/E233P/L234V/L235A/G236del/S267K, wherein the second monomer comprises amino acid variants L368D/K370S/N208D/Q295E/N384D/Q418E/N421D/E233P/L234V/L235A/G236del/S267K, and wherein numbering is according to EU numbering.

[0260] In a further embodiment and in accordance with any of the above, the first and second monomers each further comprise amino acid variants M428L/N434S, M428L/434A, or M252Y/S254T/T256E, wherein numbering is according to EU numbering.

[0261] In another aspect, a nucleic acid composition comprising nucleic acids encoding the first and second monomers and the light chain of the antibody (as described above) is provided.

[0262] In another aspect, an expression vector comprising the nucleic acids (as described above) is provided.

[0263] In another aspect, a host cell transformed with the expression vector (as described above) is provided.

[0264] In another aspect, a method of making a heterodimeric antibody is provided, the method comprising: (a) culturing the host cell (as described above) under conditions wherein the heterodimeric antibody is expressed, and (b) recovering the heterodimeric antibody.

[0265] In another aspect, a method of making a heterodimeric antibody is provided, the method comprising: (a) culturing the host cell (as described above) under conditions wherein the heterodimeric antibody is expressed, and (b) recovering the heterodimeric antibody.

[0266] In another aspect, the present disclosure provides a heterodimeric antibody, comprising: (a) a first monomer comprising, from N-terminus to C-terminus, a VH1-CH1-hinge-CH2-CH3-domain linker-scFv, wherein VH1 is a first variable heavy domain, scFv is an anti-MICA/B scFv, and CH2-CH3 is a first Fc domain; (b) a second monomer comprising, from N-terminus to C-terminus, a VH2-CH1-hinge-CH2-CH3, wherein CH2-CH3 is a second Fc domain; and (c) a light chain comprising, from N-terminus to C-terminus, a VL1-CL, wherein VL1 is a first variable light domain and CL is a constant light domain, wherein: (i) the VH1 and the VL1 form a first NKp46 antigen binding domain, (ii) the VH2 domain and the VL1 form a second NKp46

antigen binding domain, and (iii) the anti-NKp46 scFv comprises a VH3 domain, a scFv linker, and a VL2 domain.

[0267] In a further embodiment and in accordance with the above, the first and/or second NKp46 antigen binding domains comprise a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0268] In a further embodiment and in accordance with any of the above, the first and/or second NKp46 antigen binding domains comprise a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

[0269] In a further embodiment and in accordance with any of the above, the anti-MICA/B scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a first variable heavy chain VH1 domain and first variable light chain VL1 domain pair selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID

NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3

and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7

[MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

[0270] In a further embodiment and in accordance with any of the above, the anti-MICA/B scFv comprises a variable heavy domain and variable light domain pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for

D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID

Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for

7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

[0271] In a further embodiment and in accordance with any of the above, the variable light domain of the anti-MICA/B scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker, or the variable heavy domain of the anti-MICA/B scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker.

[0272] In a further embodiment and in accordance with any of the above, the scFv linker is a charged scFv linker.

[0273] In a further embodiment and in accordance with the above, the scFv linker is a charged scFv linker having the amino acid sequence $(GKPGS)_4$ (SEQ ID NO: XXX).

[0274] In a further embodiment and in accordance with any of the above, the first and second Fc domains are each variant Fc domains.

[0275] In a further embodiment and in accordance with the above, the first and/or second variant Fc domains comprise one or more FcγRIIIA (CD16a) binding variant substitutions.

[0276] In a further embodiment and in accordance with the above, the one or more FcγRIIIA (CD16a) binding variant substitutions are selected from the group including: (i) 236A, (ii) 239D, (iii) 239E, (iv) 243L, (v) 298A, (vi) 299T, (vii) 332E, (viii) 332D, (ix) 239D/332E, (x) 236A/332E, (xi) 239D/332E/330L, and (xii) 332E/330L, wherein numbering is according to EU numbering.

[0277] In a further embodiment and in accordance with the above, the first and second variant Fc domains comprise a set of FcγRIIIA (CD16a) binding variant substitutions selected from the group including: (i) S239D/I332E : S239D/I332E, (ii) S239D : S239D, (iii) I332E : I332E, (iv) WT : S239D/I332E, (v) WT : S239D, (vi) WT : I332E, (vii) S239D/I332E : WT, (viii) S239D : WT, (ix) I332E : WT, (x) S239D/I332E : S239D, (xi) S239D/I332E : I332E, (xii) S239D : S239D/I332E, (xiii) I332E : S239D/I332E, (xiv) S239D : I332E, and (xv) I332E : S239D, wherein numbering is according to EU numbering.

[0278] In a further embodiment and in accordance with any of the above, the first and/or second variant Fc domains comprise the FcγRIIIA (CD16a) binding variant substitutions of

S239D/I332E, wherein numbering is according to EU numbering.

[0279] In a further embodiment and in accordance with any of the above, the first and second variant Fc domains comprise a set of heterodimerization variants selected from the group including those depicted in Figures 4A-4F, wherein numbering is according to EU numbering.

[0280] In a further embodiment and in accordance with the above, the set of heterodimerization variants is selected from the group including: (i) S364K/E357Q : L368D/K370S, (ii) S364K : L368D/K370S, (iii) S364K : L368E/K370S, (iv) D401K : T411E/K360E/Q362E, and (v) T366W : T366S/L368A/Y407V, wherein numbering is according to EU numbering.

[0281] In a further embodiment and in accordance with any of the above, the first and second variant Fc domains further comprise one or more ablation variants.

[0282] In a further embodiment and in accordance with the above, the one or more ablation variants are E233P/L234V/L235A/G236del/S267K, wherein numbering is according to EU numbering.

[0283] In a further embodiment and in accordance with any of the above, one of the first or second variant Fc domain comprises one or more pI variants.

[0284] In a further embodiment and in accordance with the above, the one or more pI variants are N208D/Q295E/N384D/Q418E/N421D, wherein numbering is according to EU numbering.

[0285] In a further embodiment and in accordance with any of the above, the first monomer comprises amino acid variants S364K/E357Q/E233P/L234V/L235A/G236del/S267K, wherein the second monomer comprises amino acid variants L368D/K370S/N208D/Q295E/N384D/Q418E/N421D/E233P/L234V/L235A/G236del/S267K, and wherein numbering is according to EU numbering.

[0286] In a further embodiment and in accordance with any of the above, the first and second monomers each further comprise amino acid variants M428L/N434S, M428L/434A, or M252Y/S254T/T256E, wherein numbering is according to EU numbering.

[0287] In another aspect, a nucleic acid composition comprising nucleic acids encoding the first and second monomers and the light chain of the antibody (as described above) is provided.

[0288] In another aspect, an expression vector comprising the nucleic acids (as described above)

is provided.

[0289] In another aspect, a host cell transformed with the expression vector (as described above) is provided.

[0290] In another aspect, a method of making a heterodimeric antibody is provided, the method comprising: (a) culturing the host cell (as described above) under conditions wherein the heterodimeric antibody is expressed, and (b) recovering the heterodimeric antibody.

[0291] In another aspect, the present disclosure provides a method of treating cancer, comprising: administering to a human subject an antibody comprising: (i) a MICA/B antigen binding domain (as described above), (ii) a NKp46 antigen binding domain (as described above), or (iii) a heterodimeric antibody (as described above) to the human subject.

[0292] In a further embodiment and in accordance with the above, the method can further comprise administering an IL-15-Fc fusion protein to the human subject.

[0293] In a further embodiment and in accordance with the above, the IL-15 Fc fusion protein comprises the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP24045.

[0294] In another aspect, the present disclosure provides a method of blocking MICA/B shedding by NK cells in a human subject, the method comprising: administering to the human subject a therapeutically effective amount of an antibody comprising: (i) a MICA/B antigen binding domain (as described above), or (ii) a heterodimeric antibody (as described above) to the human subject.

[0295] In a further embodiment and in accordance with the above, CD16 and/or NKG2D is activated on the NK cells.

[0296] In a further embodiment and in accordance with any of the above, the method further comprises administering an IL-15-Fc fusion protein to the human subject.

[0297] In a further embodiment and in accordance with the above, the IL-15 Fc fusion protein comprises the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP24045.

[0298] In another aspect, the present disclosure provides a heterodimeric antibody comprising: (a) a first monomer; (b) a second monomer; and (c) a third monomer, wherein the first monomer, the second monomer, and the third monomer comprise: (i) the amino acid sequences of SEQ ID

NOs: XXX-XXX of XENP44543, respectively, (ii) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP45903, respectively, (iii) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP45902, respectively, (iv) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP44549, respectively, (v) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP44551, respectively, (vi) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP44553, respectively, or (vii) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP44552, respectively, as depicted in Fig. 71.

[0299] In another aspect, the present disclosure provides a nucleic acid composition comprising: (a) a first nucleic acid encoding the first monomer of a heterodimeric antibody (as described above), (b) a second nucleic acid encoding the second monomer of a heterodimeric antibody (as described above), and (c) a third nucleic acid encoding the third monomer of a heterodimeric antibody (as described above).

[0300] In another aspect, the present disclosure provides an expression vector composition comprising: (a) a first expression vector comprising the first nucleic acid encoding the first monomer of a heterodimeric antibody (as described above), (b) a second expression vector comprising the second nucleic acid encoding the second monomer of a heterodimeric antibody (as described above), and (c) a third expression vector comprising the third nucleic acid encoding the third monomer of a heterodimeric antibody (as described above).

[0301] In another aspect, the present disclosure provides a host cell comprising an expression vector composition (as described above).

[0302] In another aspect, the present disclosure provides a method of making a heterodimeric antibody, comprising: (a) culturing a host cell (as described above) under conditions wherein the heterodimeric antibody is expressed; and (b) recovering the heterodimeric antibody.

[0303] In another aspect, the present disclosure provides a method of treating cancer, comprising: administering to a human subject an antibody comprising a heterodimeric antibody (as described above).

BRIEF DESCRIPTION OF THE DRAWINGS

[0304] The novel features of the invention are set forth with particularity in the appended claims.

A better understanding of the features and advantages of the present invention will be obtained by reference to the following detailed description that sets forth illustrative embodiments, in which the principles of the invention are utilized, and the accompanying drawings (also "Fig.," "FIG.," "Figure," "Figures," "Figs.," and "FIGs." herein) of which.

[0305] Fig. 1 depicts the sequences for human and cynomolgus MICA. Such MICA are useful for the development of cross-reactive MICA antigen binding domains for ease of clinical development. The following alleles of MICA are known: MICA*001, MICA*002, MICA*004, MICA*005, MICA*006, MICA*007, MICA*008, MICA*009, MICA*010, MICA*011, MICA*012, MICA*013, MICA*014, MICA*015, MICA*016, MICA*017, MICA*018, MICA*019, MICA*020, MICA*022, MICA*023, MICA*024, MICA*025, MICA*026, MICA*027, MICA*028, MICA*029, MICA*030, MICA*031, MICA*032, MICA*033, MICA*034, MICA*035, MICA*036, MICA*037, MICA*038, MICA*039, MICA*040, MICA*041, MICA*042, MICA*043, MICA*044, MICA*045, MICA*046, MICA*047, MICA*048, MICA*049, MICA*050, MICA*051, MICA*052, MICA*053, MICA*054, MICA*055 and MICA*056.

[0306] Fig. 2 depicts the sequences for human and cynomolgus MICB. Such MICB are useful for the development of cross-reactive MICA antigen binding domains for ease of clinical development. The following alleles of MICB are known: MICB*001, MICB*002, MICB*003, MICB*004, MICB*005, MICB*006, MICB*007, MICB*008, MICB*009N, MICB*010, MICB*011, MICB*012, MICB*013, MICB*014, MICB*015, MICB*016, MICB*018, MICB*019, MICB*020, MICB*021N and MICB*022. MICB*009N and MICB*021N are null alleles which are not expressed. The three most common MICB alleles in the human population could be MICB*005, MICB*004, and MICB*002.

[0307] Fig. 3 depicts the sequences for human, mouse, and cynomolgus NKp46. Such NKp46 are useful for the development of cross-reactive NKp46 antigen binding domains for ease of clinical development.

[0308] Fig. 4 (Figs. 4A-4F) depicts useful pairs of heterodimerization variant sets (including skew and pI variants). In Fig. 4F, there are variants for which there are no corresponding "monomer 2" variants. Such variants are pI variants that can be used alone on either monomer of a NKp46 × MICA/B bsAb, or included, for example, on the non-scFv side of a format that

utilizes an scFv as a component and an appropriate charged scFv linker can be used on the second monomer that utilizes an scFv as a binding domain. Suitable charged linkers are shown in Fig. 8.

[0309] Fig. 5 depicts a list of isosteric variant antibody constant regions and their respective substitutions. pI_(-) indicates lower pI variants, while pI_(+) indicates higher pI variants. These variants can be optionally and independently combined with other variants, including heterodimerization variants, outlined herein.

[0310] Fig. 6 depicts useful ablation variants that ablate FcγR binding (also referred to as "knockouts" or "KO" variants). In some embodiments, such ablation variants are included in the Fc domain of both monomers of the subject antibody described herein. In other embodiments, the ablation variants are only included on only one variant Fc domain.

[0311] Fig. 7 depicts useful variants that enhance FcγR binding (also referred to as ADCC-enhanced variants). In some embodiments, such ADCC-enhanced variants are included in the Fc domain of both monomers of the subject antibody described herein. In other embodiments, the variants are only included on only one variant Fc domain.

[0312] Fig. 8 depicts a number of charged scFv linkers that find use in increasing or decreasing the pI of the subject heterodimeric NKp46 × MICA/B bsAbs that utilize one or more scFv as a component, as described herein. The (+H) positive linker finds particular use herein. A single prior art scFv linker with a single charge is referenced as "Whitlow", from Whitlow et al., Protein Engineering 6(8):989-995 (1993). It should be noted that this linker was used for reducing aggregation and enhancing proteolytic stability in scFvs. Such charged scFv linkers can be used in any of the subject antibody formats disclosed herein that include scFvs (e.g., 1 + 1 Fab-scFv-Fc and 2 + 1 Fab_2-scFv-Fc formats).

[0313] Fig. 9 depicts a number of exemplary domain linkers. In some embodiments, these linkers find use linking a single-chain Fv to an Fc chain. In some embodiments, these linkers may be combined in any orientation. For example, a GGGGS linker may be combined with a "lower half hinge" linker at the N-terminus or at the C-terminus.

[0314] Fig. 10 shows a particularly useful embodiment of the heterodimeric Fc domains (i.e. CH2-CH3 in this embodiment) of the NKp46 × MICA/B bsAbs of the invention.

[0315] Fig. 11 depicts various heterodimeric skewing variant amino acid substitutions that can be used with the heterodimeric antibodies described herein.

[0316] Fig. 12 (Figs. 12A-12E) shows the sequences of heterodimeric NKp46 × MICA/B bsAb backbones with ablated effector function. Heterodimeric Fc backbone 1 is based on human IgG1 (356E/358M allotype), and includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K/E357Q skew variants on a second heterodimeric Fc chain, and the E233P/L234V/L235A/G236del/S267K ablation variants on both chains. Heterodimeric Fc backbone 2 is based on human IgG1 (356E/358M allotype), and includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K skew variant on a second heterodimeric Fc chain, and the E233P/L234V/L235A/G236del/S267K ablation variants on both chains. Heterodimeric Fc backbone 3 is based on human IgG1 (356E/358M allotype), and includes the L368E/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K skew variant on a second heterodimeric Fc chain, and the E233P/L234V/L235A/G236del/S267K ablation variants on both chains. Heterodimeric Fc backbone 4 is based on human IgG1 (356E/358M allotype), and includes the K360E/Q362E/T411E skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the D401K skew variant on a second heterodimeric Fc chain, and the E233P/L234V/L235A/G236del/S267K ablation variants on both chains. Heterodimeric Fc backbone 5 is based on human IgG1 (356D/358L allotype), and includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K/E357Q skew variants on a second heterodimeric Fc chain, and the E233P/L234V/L235A/G236del/S267K ablation variants on both chains. Heterodimeric Fc backbone 6 is based on human IgG1 (356E/358M allotype), and includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K/E357Q skew variants on a second heterodimeric Fc chain, and the E233P/L234V/L235A/G236del/S267K ablation variants and N297A variant that removes glycosylation on both chains. Heterodimeric Fc backbone 7 is based on human IgG1 (356E/358M allotype), and includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K/E357Q

skew variants on a second heterodimeric Fc chain, and the E233P/L234V/L235A/G236del/S267K ablation variants and N297S variant that removes glycosylation on both chains. Heterodimeric Fc backbone 8 is based on human IgG4, and includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K/E357Q skew variants on a second heterodimeric Fc chain, and the S228P (according to EU numbering, S241P in Kabat) variant that ablates Fab arm exchange (as is known in the art) on both chains. Heterodimeric Fc backbone 9 is based on human IgG2, and includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K/E357Q skew variants on a second heterodimeric Fc chain. Heterodimeric Fc backbone 10 is based on human IgG2, and includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K/E357Q skew variants on a second heterodimeric Fc chain, and the S267K ablation variant on both chains. Heterodimeric Fc backbone 11 is based on human IgG1 (356E/358M allotype), and includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K/E357Q skew variants on a second heterodimeric Fc chain, and the E233P/L234V/L235A/G236del/S267K ablation variants and M428L/N434S Xtend variants on both chains. Heterodimeric Fc backbone 12 is based on human IgG1 (356E/358M allotype), and includes the L368D/K370S skew variants on a first heterodimeric Fc chain, the S364K/E357Q skew variants and P217R/P229R/N276K pI variants on a second heterodimeric Fc chain, and the E233P/L234V/L235A/G236del/S267K ablation variants on both chains. Heterodimeric Fc backbone 13 is based on human IgG1 (356E/358M allotype), and includes the T366W skew variant on a first heterodimeric Fc chain, the T366S/L368A/Y407V skew variants and H435R/Y436F purification variants on a second heterodimeric Fc chain, and the L234A/L235A/D265S ablation variants on both chains. Heterodimeric Fc backbone 14 is based on human IgG1 (356E/358M allotype), and includes the T366W skew variant on a first heterodimeric Fc chain, the T366S/L368A/Y407V skew variants and H435R/Y436F purification variants on a second heterodimeric Fc chain, and the L234A/L235A/D265S ablation variants and M252Y/S254T/T256E half-life extension variants on both chains. Heterodimeric Fc backbone 15 is based on human IgG1 (356D/358L allotype), and includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the

S364K/E357Q skew variants on a second heterodimeric Fc chain, and the E233P/L234V/L235A/G236del/S267K ablation variants and M428L/N434S Xtend variants on both chains. Heterodimeric Fc backbone 16 is based on human IgG1 (356E/358M allotype), and includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K/E357Q skew variants on a second heterodimeric Fc chain, and the E233P/L234V/L235A/G236del/S267K ablation variants and M428L/N434A Xtend variants on both chains. Heterodimeric Fc backbone 17 is based on human IgG1 (356D/358L allotype), and includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K/E357Q skew variants on a second heterodimeric Fc chain, and the E233P/L234V/L235A/G236del/S267K ablation variants and M428L/N434A Xtend variants on both chains.

[0317] Included within each of these backbones are sequences that are 90, 95, 98 and 99% identical (as defined herein) to the recited sequences, and/or contain from 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 additional amino acid substitutions (as compared to the "parent" of the Figure, which, as will be appreciated by those in the art, already contain a number of amino acid modifications as compared to the parental human IgG1 (or IgG2 or IgG4, depending on the backbone). That is, the recited backbones may contain additional amino acid modifications (generally amino acid substitutions) in addition or as an alternative to the skew, pI and ablation variants contained within the backbones of this Figure. Additionally, the backbones depicted herein may include deletion of the C-terminal glycine (K446_) and/or lysine (K447_). The C-terminal glycine and/or lysine deletion may be intentionally engineered to reduce heterogeneity or in the context of certain bispecific formats, such as the mAb-scFv format. Additionally, C-terminal glycine and/or lysine deletion may occur naturally for example during production and storage.

[0318] Fig. 13 (Figs. 13A-13C) shows the sequences of several useful heterodimeric NKp46 × MICA/B bsAb backbones based on human IgG1 and having WT effector function. Heterodimeric Fc backbone 1 is based on human IgG1 (356E/358M allotype), and includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K/E357Q skew variants on a second heterodimeric Fc chain. Heterodimeric Fc backbone 2 is based on human IgG1 (356E/358M allotype), and includes the

L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K skew variant on a second heterodimeric Fc chain. Heterodimeric Fc backbone 3 is based on human IgG1 (356E/358M allotype), and includes the L368E/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K skew variant on a second heterodimeric Fc chain. Heterodimeric Fc backbone 4 is based on human IgG1 (356E/358M allotype), and includes the K360E/Q362E/T411E skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the D401K skew variant on a second heterodimeric Fc chain. Heterodimeric Fc backbone 5 is based on human IgG1 (356D/358L allotype), and includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K/E357Q skew variants on a second heterodimeric Fc chain. Heterodimeric Fc backbone 6 is based on human IgG1 (356E/358M allotype), and includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K/E357Q skew variants on a second heterodimeric Fc chain, and N297A variant that removes glycosylation on both chains. Heterodimeric Fc backbone 7 is based on human IgG1 (356E/358M allotype), and includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K/E357Q skew variants on a second heterodimeric Fc chain, and N297S variant that removes glycosylation on both chains. Heterodimeric Fc backbone 8 is based on human IgG1 (356E/358M allotype), and includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K/E357Q skew variants on a second heterodimeric Fc chain, and M428L/N434S Xtend variants on both chains. Heterodimeric Fc backbone 9 is based on human IgG1 (356D/358L allotype), and includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K/E357Q skew variants on a second heterodimeric Fc chain, and the E233P/L234V/L235A/G236del/S267K ablation variants and M428L/N434S Xtend variants on both chains. Heterodimeric Fc backbone 10 is based on human IgG1 (356E/358M allotype), and includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K/E357Q skew variants on a second heterodimeric Fc chain, and M428L/N434A Xtend variants on both chains. Heterodimeric Fc backbone 11 is based on human IgG1 (356D/358L allotype), and

includes the L368D/K370S skew variants and the Q295E/N384D/Q418E/N421D pI variants on a first heterodimeric Fc chain, the S364K/E357Q skew variants on a second heterodimeric Fc chain, and M428L/N434A Xtend variants on both chains.

[0319] Included within each of these backbones are sequences that are 90, 95, 98 and 99% identical (as defined herein) to the recited sequences, and/or contain from 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 additional amino acid substitutions (as compared to the "parent" of the Figure, which, as will be appreciated by those in the art, already contain a number of amino acid modifications as compared to the parental human IgG1 (or IgG2 or IgG4, depending on the backbone). That is, the recited backbones may contain additional amino acid modifications (generally amino acid substitutions) in addition or as an alternative to the skew, pI and ablation variants contained within the backbones of this Figure. Additionally, the backbones depicted herein may include deletion of the C-terminal glycine (K446_) and/or lysine (K447_). The C-terminal glycine and/or lysine deletion may be intentionally engineered to reduce heterogeneity or in the context of certain bispecific formats, such as the mAb-scFv format. Additionally, C-terminal glycine and/or lysine deletion may occur naturally for example during production and storage.

[0320] Fig. 14 (Figs. 14A-14C) shows the sequences of several useful heterodimeric NKp46 × MICA/B bsAb backbones based on human IgG1 and having enhanced ADCC function. The sequences here are based on heterodimeric Fc backbone 1 in Figure 13, although the ADCC variants in Figure 7 may also be included in any of the other heterodimeric Fc backbones in Figure 13. ADCC-enhanced Heterodimeric Backbone 1 includes S239D/I332E on both the first and the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 2 includes S239D on both the first and the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 3 includes I332E on both the first and the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 4 includes S239D/I332E on the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 5 includes S239D on the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 6 includes I332E on the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 7 includes S239D/I332E on the first heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 8 includes S239D on the first heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 9 includes I332E on the first heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 10 includes

S239D/I332E on the first heterodimeric Fc chain and S239D on the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 11 includes S239D/I332E on the first heterodimeric Fc chain and I332E on the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 12 includes S239D on the first heterodimeric Fc chain and S239D/I332E on the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 13 includes I332E on the first heterodimeric Fc chain and S239D/I332E on the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 14 includes S239D on the first heterodimeric Fc chain and I332E on the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 15 includes I332E on the first heterodimeric Fc chain and S239D on the second heterodimeric Fc chain.

[0321] Included within each of these backbones are sequences that are 90, 95, 98 and 99% identical (as defined herein) to the recited sequences, and/or contain from 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 additional amino acid substitutions (as compared to the "parent" of the Figure, which, as will be appreciated by those in the art, already contain a number of amino acid modifications as compared to the parental human IgG1. That is, the recited backbones may contain additional amino acid modifications (generally amino acid substitutions) in addition or as an alternative to the skew, pI and ablation variants contained within the backbones of this Figure. Additionally, the backbones depicted herein may include deletion of the C-terminal glycine (K446_) and/or lysine (K447_). The C-terminal glycine and/or lysine deletion may be intentionally engineered to reduce heterogeneity or in the context of certain bispecific formats, such as the mAb-scFv format. Additionally, C-terminal glycine and/or lysine deletion may occur naturally for example during production and storage.

[0322] Fig. 15 (Figs. 15A-15C) shows the sequences of several useful heterodimeric NKp46 × MICA/B bsAb backbones based on human IgG1 and having enhanced ADCC function and enhanced serum half-life. The sequences here are based on heterodimeric Fc backbone 8 in Figure 13, although the ADCC variants in Figure 7 may also be included in any of the other heterodimeric Fc backbones in Figure 13. ADCC-enhanced Heterodimeric Backbone 1 w/Xtend includes S239D/I332E on both the first and the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 2 w/Xtend includes S239D on both the first and the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 3 w/Xtend includes I332E on

both the first and the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 4 w/Xtend includes S239D/I332E on the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 5 w/Xtend includes S239D on the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 6 w/Xtend includes I332E on the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 7 w/Xtend includes S239D/I332E on the first heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 8 w/Xtend includes S239D on the first heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 9 w/Xtend includes I332E on the first heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 10 w/Xtend includes S239D/I332E on the first heterodimeric Fc chain and S239D on the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 11 w/Xtend includes S239D/I332E on the first heterodimeric Fc chain and I332E on the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 12 w/Xtend includes S239D on the first heterodimeric Fc chain and S239D/I332E on the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 13 w/Xtend includes I332E on the first heterodimeric Fc chain and S239D/I332E on the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 14 w/Xtend includes S239D on the first heterodimeric Fc chain and I332E on the second heterodimeric Fc chain. ADCC-enhanced Heterodimeric Backbone 15 w/Xtend includes I332E on the first heterodimeric Fc chain and S239D on the second heterodimeric Fc chain.

[0323] Included within each of these backbones are sequences that are 90, 95, 98 and 99% identical (as defined herein) to the recited sequences, and/or contain from 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 additional amino acid substitutions (as compared to the "parent" of the Figure, which, as will be appreciated by those in the art, already contain a number of amino acid modifications as compared to the parental human IgG1. That is, the recited backbones may contain additional amino acid modifications (generally amino acid substitutions) in addition or as an alternative to the skew, pI and ablation variants contained within the backbones of this Figure. Additionally, the backbones depicted herein may include deletion of the C-terminal glycine (K446_) and/or lysine (K447_). The C-terminal glycine and/or lysine deletion may be intentionally engineered to reduce heterogeneity or in the context of certain bispecific formats, such as the mAb-scFv format. Additionally, C-terminal glycine and/or lysine deletion may occur naturally for example during production and storage.

[0324] Fig. 16 (Figs. 16A-16G) depicts illustrative sequences of heterodimeric NKp46 × MICA/B bsAb backbone for use in the 2 + 1 mAb-scFv format. It should be noted that any of the additional backbones depicted in Figs. 12-15 may be adapted for use in the 2 + 1 mAb-scFv format with or without including K447_ on one or both chains.

[0325] Fig. 17 depicts sequences for "CH1" that find use in embodiments of NKp46 × MICA/B bsAbs.

[0326] Fig. 18 depicts sequences for "hinge" that find use in embodiments of NKp46 × MICA/B bsAbs.

[0327] Fig. 19 depicts the constant domain of the cognate light chains which find use in the subject NKp46 × MICA/B bsAbs that utilize a Fab binding domain.

[0328] Fig. 20 depicts soluble MICA/B (sMICA/B) binding NKG2D receptor on NK cells inhibiting signaling. MICA/B bsAbs of the invention may engage cell surface MICA/B and prevent shedding as soluble MICA/B.

[0329] Fig. 21 (Figs. 21A-21S) depicts the variable heavy and variable light chain sequences for novel MICA/B binding domains which may find use in the invention. As noted herein and is true for every sequence herein containing CDRs, the exact identification of the CDR locations may be slightly different depending on the numbering used as is shown in Table 2, and thus included herein are not only the CDRs that are underlined but also CDRs included within the V_H and V_L domains using other numbering systems. Furthermore, as for all the sequences in the Figures, these V_H and V_L sequences can be used either in a scFv format or in a Fab format.

[0330] Fig. 22 (Figs. 22A and 22B) depicts the variable heavy and variable light chain sequences for additional MICA/B binding domains which may find use in the invention. As noted herein and is true for every sequence herein containing CDRs, the exact identification of the CDR locations may be slightly different depending on the numbering used as is shown in Table 2, and thus included herein are not only the CDRs that are underlined but also CDRs included within the V_H and V_L domains using other numbering systems. Furthermore, as for all the sequences in the Figures, these V_H and V_L sequences can be used either in a scFv format or in a Fab format.

[0331] Fig. 23 depicts the variable heavy and variable light chain sequences for 2C10A3.372, a novel phage-derived NKp46 binding domain. CDRs are underlined and slashes indicate the

border(s) between the variable regions and constant domain. As noted herein and is true for every sequence herein containing CDRs, the exact identification of the CDR locations may be slightly different depending on the numbering used as is shown in Table 2, and thus included herein are not only the CDRs that are underlined but also CDRs included within the V_H and V_L domains using other numbering systems. Furthermore, as for all the sequences in the Figures, these V_H and V_L sequences can be used either in a scFv format or in a Fab format.

[0332] Fig. 24 depicts the variable heavy and variable light chain sequences for additional NKp46 binding domains which may find use in the invention. CDRs are underlined and slashes indicate the border(s) between the variable regions and constant domain. As noted herein and is true for every sequence herein containing CDRs, the exact identification of the CDR locations may be slightly different depending on the numbering used as is shown in Table 2, and thus included herein are not only the CDRs that are underlined but also CDRs included within the V_H and V_L domains using other numbering systems. Furthermore, as for all the sequences in the Figures, these V_H and V_L sequences can be used either in a scFv format or in a Fab format.

[0333] Fig. 25 (Figs. 25A-25E) depicts a few of the formats of the present invention. Fig. 25A depicts the "1 + 1 Fab × scFv" format, with a first Fab arm binding a first antigen and a second scFv arm binding second antigen. The 1 + 1 Fab-scFv-Fc format comprises a first monomer comprising a first heavy chain variable region (VH1) covalently attached to the N-terminus of a first heterodimeric Fc backbone (optionally via a linker), a second monomer comprising a single-chain Fv covalently attached to the N-terminus of a second corresponding heterodimeric Fc backbone (optionally via a linker), and a third monomer comprising a light chain variable region attached covalently to a light chain constant domain, wherein the light chain variable region is complementary to the VH1. Fig. 25B depicts the "1 + 1 empty × Fab-scFv" format, with a first Fab arm binding a first antigen and a second scFv arm binding a second antigen. The 1 + 1 empty × Fab-scFv format comprises a first monomer comprising a first heterodimeric Fc backbone, a second monomer comprising a heavy chain variable region (VH1) covalently attached (optionally via a linker) to a single-chain Fv covalently attached (optionally via a linker) to the N-terminus of a second corresponding heterodimeric Fc backbone, and a third monomer comprising a light chain variable region attached covalently to a light chain constant domain, wherein the light chain variable region is complementary to the VH1. Fig. 25C depicts the "2 + 1

Fab × Fab-scFv" format, with a first Fab arm and a second Fab-scFv arm, wherein the Fabs bind a first antigen and the scFv binds second antigen. The 2 + 1 Fab × Fab-scFv format comprises a first monomer comprising a first heavy chain variable region (VH1) covalently attached to the N-terminus of a first heterodimeric Fc backbone (optionally via a linker), a second monomer comprising the VH1 covalently attached (optionally via a linker) to a single-chain Fv covalently attached (optionally via a linker) to the N-terminus of a second corresponding heterodimeric Fc backbone, and a third monomer comprising a light chain variable region attached covalently to a light chain constant domain, wherein the light chain variable region is complementary to the VH1. Fig. 25D depicts the "2 + 1 Fab2 × scFv" format, with a first Fab-Fab arm and a second scFv arm, wherein the Fabs bind a first antigen and the scFv binds second antigen. The 2 + 1 Fab2 × scFv format comprises a first monomer comprising a first heavy chain variable region (VH1) covalently attached to a CH1 domain covalently attached to a second VH1 (optionally via a linker) that is further covalently attached to the N-terminus of a first heterodimeric Fc backbone (optionally via a linker), a second monomer comprising a single-chain Fv covalently attached (optionally via a linker) to the N-terminus of a second corresponding heterodimeric Fc backbone, and a third monomer comprising a light chain variable region attached covalently to a light chain constant domain, wherein the light chain variable region is complementary to the VH1. Fig. 25E depicts the "2 + 1 mAb-scFv" format, with a first Fc comprising an N-terminal Fab arm binding a first antigen and a second Fc comprising an N-terminal Fab arm binding the first antigen and a C-terminal scFv binding a second antigen. The 2 + 1 mAb-scFv format comprises a first monomer comprising VH1-CH1-hinge-CH2-CH3, a second monomer comprising VH1-CH1-hinge-CH2-CH3-scFv, and a third monomer comprising VL-CL. The VL pairs with the first and second VH1 to form binding domains with binding specificity for the first antigen. In some bsAbs, the first antigen is NKp46 and the second antigen is MICA/B; while in other bsAbs, the first antigen is MICA/B and the second antigen is NKp46.

[0334] Fig. 26 (Figs. 26A and 26B) depicts the sequences of control molecules.

[0335] Fig. 27 depicts a proposed mechanism of action for the MICA/B bsAbs of the invention. 1) the bsAb engages MICA/B and tumor antigen on cancer cells, 2) the bsAb engages and activates CD16 on NK cells, and 3) the MICA/B bound by the bsAb engages and signals via NKG2D on NK cells.

[0336] Fig. 28 (Figs. 28A-28H) depicts sequences for B7H3 antibodies comprising Fc variants to enhance ADCC (or WT effector function in the case of XENP41021).

[0337] Fig. 29 depicts a matrix of symmetric and asymmetric ADCC-enhanced Fc variants that have been engineered, as well as the corresponding Tm data, affinity data, production yield, ADCC activity and target cell killing activity. As shown, each Fc monomer (-Fc HC or +Fc-scfv-Fc) has either the S239D and I332E (V90) variants, the S239D variant alone, the I332E variant alone, or is wild-type at the 239 and 332 positions; and each test article has a different combination of these Fc monomers.

[0338] Fig. 30 depicts the range of ADCC activity of the various symmetric and asymmetric V90 variants outlined in Fig. 29. The results show a large range in levels of fold change in ADCC activity of each construct compared to wild type, with V90 having one of the highest fold changes in ADCC activity compared to WT, and the various S239D and I332E combinations showing a broad range of intermediate levels fold changes.

[0339] Fig. 31 (Figs. 31A and 31B) depicts the sequences or illustrative NKp46 × MICA/B bsAbs in the 1 + 1 Fab × scFv format. CDRs are underlined and slashes indicate the border(s) between the variable regions, linkers, Fc regions, and constant domains. It should be noted that the NKp46 × MICA/B bsAbs can utilize variable region, Fc region, and constant domain sequences that are 90, 95, 98 and 99% identical (as defined herein), and/or contain from 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 amino acid substitutions. In addition, each sequence outlined herein can include or exclude the M428L/N434S variants in one or preferably both Fc domains, which results in longer half-life in serum. Further, each sequence outlined herein can include or exclude S239D and/or I332E variants in one or both Fc domains, which results in enhanced ADCC.

[0340] Fig. 32 depicts the sequences or illustrative NKp46 × MICA/B bsAbs in the 1 + 1 empty × Fab-scFv format. CDRs are underlined and slashes indicate the border(s) between the variable regions, linkers, Fc regions, and constant domains. It should be noted that the NKp46 × MICA/B bsAbs can utilize variable region, Fc region, and constant domain sequences that are 90, 95, 98 and 99% identical (as defined herein), and/or contain from 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 amino acid substitutions. In addition, each sequence outlined herein can include or exclude the M428L/N434S variants in one or preferably both Fc domains, which results in longer half-life in serum. Further, each sequence outlined herein can include or exclude S239D and/or I332E

variants in one or both Fc domains, which results in enhanced ADCC.

[0341] Fig. 33 depicts the sequences or illustrative NKp46 × MICA/B bsAbs in the 2 + 1 Fab × Fab-scFv format. CDRs are underlined and slashes indicate the border(s) between the variable regions, linkers, Fc regions, and constant domains. It should be noted that the NKp46 × MICA/B bsAbs can utilize variable region, Fc region, and constant domain sequences that are 90, 95, 98 and 99% identical (as defined herein), and/or contain from 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 amino acid substitutions. In addition, each sequence outlined herein can include or exclude the M428L/N434S variants in one or preferably both Fc domains, which results in longer half-life in serum. Further, each sequence outlined herein can include or exclude S239D and/or I332E variants in one or both Fc domains, which results in enhanced ADCC.

[0342] Fig. 34 depicts the sequences or illustrative NKp46 × MICA/B bsAbs in the 2 + 1 Fab2 × scFv format. CDRs are underlined and slashes indicate the border(s) between the variable regions, linkers, Fc regions, and constant domains. It should be noted that the NKp46 × MICA/B bsAbs can utilize variable region, Fc region, and constant domain sequences that are 90, 95, 98 and 99% identical (as defined herein), and/or contain from 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 amino acid substitutions. In addition, each sequence outlined herein can include or exclude the M428L/N434S variants in one or preferably both Fc domains, which results in longer half-life in serum. Further, each sequence outlined herein can include or exclude S239D and/or I332E variants in one or both Fc domains, which results in enhanced ADCC.

[0343] Fig. 35 depicts the sequences or illustrative NKp46 × MICA/B bsAbs in the 2 + 1 mAb-scFv format. CDRs are underlined and slashes indicate the border(s) between the variable regions, linkers, Fc regions, and constant domains. It should be noted that the NKp46 × MICA/B bsAbs can utilize variable region, Fc region, and constant domain sequences that are 90, 95, 98 and 99% identical (as defined herein), and/or contain from 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 amino acid substitutions. In addition, each sequence outlined herein can include or exclude the M428L/N434S variants in one or preferably both Fc domains, which results in longer half-life in serum. Further, each sequence outlined herein can include or exclude S239D and/or I332E variants in one or both Fc domains, which results in enhanced ADCC.

[0344] Fig. 36 depicts epitope binning of novel MICA/B binding domains (as well as several prior art MICA/B binding domains).

[0345] Fig. 37 shows surface MICA upregulation is inversely correlated with soluble MICA. Therefore, surface MICA was used as a readout for screening novel MICA/B binding domains for their ability to prevent MICA and MICB shedding.

[0346] Fig. 38 depicts upregulation of surface MICA*002 versus surface MICA*008 to screen MICA/B binding domains that are able to prevent shedding of multiple MICA allelic variants.

[0347] Fig. 39 depicts upregulation of surface MICB*004 versus surface MICB*005 to screen MICA/B binding domains that are able to prevent shedding of multiple MICB allelic variants.

[0348] Fig. 40 depicts upregulation of surface MICA*004 under normoxic conditions versus hypoxic conditions.

[0349] Fig. 41 depicts lysis of MCF7 target cells (4:1 E:T) by NK cells following 72 hours treatment with the novel MICA/B binding domains.

[0350] Fig. 42 depicts production of IFNγ by NK cells in co-culture with MCF7 target cells (10:1 E:T) following 24 hours treatment with the novel MICA/B binding domains.

[0351] Fig. 43 depicts blockade of soluble MICA shedding from CHO cells engineered to express MICA*004-GFP by novel MICA/B binding domains.

[0352] Fig. 44 depicts binding to MICA*004 over-expressed in A375 cell line by novel MICA/B binding domains.

[0353] Fig. 45 depicts surface upregulation of MICA*004 expressed in CHO cell line engineered to express MICA*004-GFP following treatment with novel MICA/B binding domains under normoxic conditions.

[0354] Fig. 46 depicts surface upregulation of MICA*004 expressed in CHO cell line engineered to express MICA*004-GFP following treatment with novel MICA/B binding domains under hypoxic conditions.

[0355] Fig. 47: Pan tumor TMA was stained with MICA/B antibodies showing that breast (top left panel), testis (top right panel), esophagus (bottom left panel), and stomach (bottom right panel) show tumor MICA/B expression. Pancreas, skin, lung, and ovary are additional tumor histologies showing tumor MICA/B expression (not shown).

[0356] Fig. 48 depicts MICA/B mAbs mechanisms of action. 1) ADCC, 2) NKG2D agonism,

and 3) blockade of MICA and MICB cleavage.

[0357] Fig. 49 depicts tumor cell killing (Fig. 49A) and induction of IFNγ secretion (Fig. 49B) by NK cells co-cultured with A375-B2M-KO-RP tumor cell line and dose titration of MICA/B mAb alone, MICA/B mAb with blocking NKG2D mAb, RSV isotype control mAb alone, or RSV mAb with blocking NKG2D mAb.

[0358] Fig. 50 depicts blockade of soluble MICA (Fig. 50A) and blockade of soluble MICB (Fig. 50B) after incubating CHO engineered to express MICA or MICB with MICA/B mAb, RSV mAb, or batimastat.

[0359] Fig. 51 depicts population frequencies of MICA (Fig. 51A) and MICB (Fig. 51B) allelic variants.

[0360] Fig. 52 depicts α3 domain sequence alignment to identify higher frequency MICA and MICB variants.

[0361] Fig. 53 depicts correlation between IFNγ AUC and target lysis EC50 of different MICA/B mAbs.

[0362] Fig. 54 depicts target lysis (Fig. 54A) and induction of IFNγ secretion (Fig. 54B) by NK cells co-cultured with MCF7-RFP cells and 1E11-1-based mAb.

[0363] Fig. 55 depicts cartoon illustrating surface MICA (MICB) density, measured via C-terminal GFP intensity, inversely correlates with the membrane MICA (MICB) cleavage.

[0364] Fig. 56 depicts upregulation of surface MICA*008 versus surface MICB*005 to screen MICA/B binding domains that are able to prevent shedding of MICA and MICB.

[0365] Fig. 57 depicts upregulation of surface MICA*002 versus surface MICB*004 to screen MICA/B binding domains that are able to prevent shedding of MICA and MICB.

[0366] Fig. 58 depicts hypothesized NKp46 x MICA/B mechanisms of action including 1) ADCC, 2) NKG2D agonism, 3) blockade of MICA and MICB cleavage, and 4) NKp46 agonism.

[0367] Fig. 59 depicts induction of IFNγ secretion (Fig. 59A) and target cell lysis (Fig. 59B) by NK cells co-cultured with A375-B2M-KO-RFP cells and NKp46 x MICA/B bsAbs with WT or KO effector function with or without NKG2D antibody that blocks MICA binding to the receptor.

[0368] Fig. 60 depicts induction of IFNγ secretion (Fig. 60A) and target cell lysis (Fig. 60B) by NK cells co-cultured with A375-B2M-KO-RFP cells and NKp46 x MICA/B or RSV x MICA/B bsAbs with WT or KO effector function with or without NKG2D antibody that blocks MICA binding to the receptor.

[0369] Fig. 61 depicts surface MICA density (indicative of blockade of MICA cleavage) (Fig. 61A) and target cell lysis (Fig. 61B) after co-culturing NK cells with A375-B2M-KO-RFP cells and NKp46 x MICA/B in various formats.

[0370] Fig. 62 depicts target cell lysis after co-culturing NK cells with A375-B2M-KO-RFP cells and NKp46 x MICA/B in various formats with KO effector function.

[0371] Fig. 63: Surface MICA upregulation inversely correlates with soluble MICA. Therefore, surface MICA was used as a readout for screening novel MICA/B binding domains for their ability to prevent MICA and MICB shedding.

[0372] Fig. 64 depicts target cell lysis after co-culturing NK cells with A375-B2M-KO-RFP cells and NKp46 × MICA/B in various formats with WT (Fig. 64A) or KO (Fig. 64B) effector function.

[0373] Fig. 65 depicts induction of IFNγ secretion by NK cells co-cultured with A375-B2M-KO-RFP cells and NKp46 × MICA/B bsAb without IL-15-Fc fusion (Fig. 65A) and in combination with IL-15-Fc fusion (Fig. 65B).

[0374] Fig. 66 depicts sequences for an illustrative IL-15-Fc fusion that may be combined with the NKp46 × MICA/B bsAbs of the invention.

[0375] Fig. 67 depicts NKp46 mediation of target cell lysis in the absence of CD16 engagement. Test articles XENP43729 (B7H3 × RSV control bsAb) and XENP44543 (B7H3 × NKp46 bsAb), both having an IgG1 Fc domain that is null for CD16 binding (FcKO), were mixed with purified NK cells and added to a plate of MCF7 target cells at a 3:1 E:T ratio. MCF7 cell lysis was measured by Incucyte at 3-hour intervals.

[0376] Fig. 68 depicts the comparatively lower fratricide levels induced by NKp46 × B7H3 bsAbs compared to NKG2D × B7H3 bsAb XENP43933. In this experiment, NK cells were mixed with the indicated dilutions of test articles, incubated, stained with Zombie Aqua for 15 minutes and washed before analysis via flow cytometry.

[0377] Fig. 69 depicts the target cell lysis induced by B7H3 × NKp46 bsAbs of varying affinities. Test articles were mixed with purified NK cells and added to a plate of MCF7 target cells at a 3:1 E:T ratio. MCF7 cell lysis was measured by Incucyte at 3-hour intervals. As depicted, stronger NKp46 affinity correlates with greater levels of target cell lysis.

[0378] Fig. 70 (Figs. 70A-70D) depicts the sequences for various comparator and control antibodies.

[0379] Fig. 71 (Figs. 71A-71D) depicts the sequences for several B7H3 × NKp46 antibodies of the invention.

[0380] Fig. 72 depicts binding data of MICA/B binding domains of the invention, both from an ELISA measuring the amount of soluble/shed MICA/B, as well as KD data from the Carterra® LSA.

[0381] Fig. 73 depicts the comparable binding of murine(H0L0) and humanized (H1L1, H1L2, H2L1, and H2L2) variants of 1E11 and 2C11 to CHO cells expressing MICA*004.

DETAILED DESCRIPTION

I. Overview

[0382] The description is presented to enable one of ordinary skill in the art to make and use the invention and is provided in the context of a patent application and its requirements. The section headings used herein are for organization purposes only and are not to be construed as limiting the subject matter described. While various embodiments of the invention(s) of the present disclosure have been shown and described herein, it will be obvious to those skilled in the art that such embodiments are provided by way of example only. Numerous variations, changes, and substitutions may occur to those skilled in the art without departing from the invention(s). It should be understood that various alternatives to the embodiments of the invention(s) described herein may be employed in practicing any one of the inventions(s) set forth herein.

[0383] All patents, published patent applications, other publications, and sequences from GenBank, and other databases referred to herein are incorporated by reference in their entirety with respect to the related technology.

II. Nomenclature

[0384] The antibodies provided herein are listed in several different formats. In some instances, each monomer of a particular antibody is given a unique "XENP" number, although as will be appreciated in the art, a longer sequence might contain a shorter one. For example, a "scFv-Fc" monomer of a 1 + 1 Fab-scFv-Fc format antibody may have a first XENP number, while the scFv domain itself will have a different XENP number. Some molecules have three polypeptides, so the XENP number, with the components, is used as a name. Thus, the molecule XENP46810, which is in 1 + 1 Fab-scFv-Fc format, comprises three sequences (see Fig. 31A) a "Fab-Fc Heavy Chain" monomer ("Chain 1"); 2) a "scFv-Fc Heavy Chain" monomer ("Chain 2"); and 3) a "Light Chain" monomer ("Chain 3") or equivalents, although one of skill in the art would be able to identify these easily through sequence alignment. These XENP numbers are in the sequence listing as well as identifiers, and used in the Figures. In addition, one molecule, comprising the three components, gives rise to multiple sequence identifiers. For example, the listing of the Fab includes, the full heavy chain sequence, the variable heavy domain sequence and the three CDRs of the variable heavy domain sequence, the full light chain sequence, a variable light domain sequence and the three CDRs of the variable light domain sequence. A Fab-scFv-Fc monomer includes a full-length sequence, a variable heavy domain sequence, 3 heavy CDR sequences, and an scFv sequence (include scFv variable heavy domain sequence, scFv variable light domain sequence and scFv linker). Note that some molecules herein with a scFv domain use a single charged scFv linker (+H), although others can be used. In addition, the naming nomenclature of particular antigen binding domains (e.g., NKp46 and MICA/B binding domains) use a "Hx.xx_Ly.yy" type of format, with the numbers being unique identifiers to particular variable chain sequences. Thus, an Fv domain of the antigen binding domain is "H1 L1," which indicates that the variable heavy domain, H1, was combined with the light domain L1. In the case that these sequences are used as scFvs, the designation "H1 L1," indicates that the variable heavy domain, H1 is combined with the light domain, L1, and is in V_H-linker-V_L orientation, from N- to C-terminus. This molecule with the identical sequences of the heavy and light variable domains but in the reverse order (V_L-linker-V_H orientation, from N- to C-terminus) would be designated "L1_H1.1". Similarly, different constructs may "mix and match" the heavy and light chains as will be evident from the sequence listing and the figures.

III. Definitions

[0385] In order that the application may be more completely understood, several definitions are set forth below. Such definitions are meant to encompass grammatical equivalents.

[0386] "MICA and MICB" and "MICA/B" is herein meant NKG2D ligands which can, in some instances, be upregulated in several human cancers. MICA/B are transmembrane proteins with MHC-like extracellular domains that, do not associate with beta-2 microglobulin nor present antigens. The proteins can undergo proteolytic cleavage in a multistep process and thereafter, the soluble MICA/B can bind NKG2D on NK cells. In some cases, the soluble MICA/B is shed in the blood plasma and serum in subjects with cancer. Additional information includes amino acid sequences of "MHC class I polypeptide-related sequence A," "MIC-A" or "MICA" can be found in, for example, UniProt No. Q29983 (human), GenBank Accession Numbers NP_000238.1 (human), NP_001170990.1 (human), NP_001276081 (human), NP_001276082 (human), and NP_001276082 (human). Additional information includes amino acid sequences of "MHC class I polypeptide-related sequence B," "MIC-B" or "MICB" can be found in, for example, UniProt No. Q29980 (human), GenBank Accession Numbers NP_001276089 (human), NP_001276090 (human), NP_005922 (human), NP_715641 (mouse), and NP_715642 (mouse). Exemplary MICA/B sequences are depicted in Figs. 1 and 2. Unless otherwise noted, references to MICA/B are to the human MICA/B sequences.

[0387] By "NKp46," "NCR1," "CD335," "LY94," "NK-p46," "natural cytotoxicity triggering receptor 1" (e.g., GenBank Accession Numbers NM_004829.7 (human), NM_001145457.3 (human), NM_001145458.3 (human), NM_001242356.3 (human), NM_001242357.3 (human), NM_010746.3 (mouse), and NM_001368364.1 (mouse)), is meant a transmembrane protein belonging to the natural cytotoxicity receptor family. Exemplary NKp46 sequences are depicted in Fig. 3. Unless otherwise noted, references to NKp46 are to the human NKp46 sequences.

[0388] By "NKG2D," "NKG2-D," "natural killer group 2D," "CD314," (e.g., GenBank Accession Numbers NP_031386.2 (human), NP_001186734.1 (human), and NP_001076791.1 (mouse)), herein is meant a transmembrane protein belonging to the NKG2 family of C-type lectin-like receptors. NKG2D is a major recognition receptor for the detection and elimination of transformed and/or infected cells as its ligands are induced during cellular stress, either as a result of infection or genomic stress, such as in cancer. In humans, NKG2D is expressed by NK

cells, γδ T cells, and $CD8^+$ αβ T cells.

[0389] By "ablation" herein is meant a decrease or removal of activity. Thus, for example, "ablating FcγR binding" means the Fc region amino acid variant has less than 50% starting binding as compared to an Fc region not containing the specific variant, with more than 70-80-90-95-98% loss of activity being preferred, and in general, with the activity being below the level of detectable binding in a Biacore, SPR or BLI assay.

[0390] By "ADCC" or "antibody dependent cell-mediated cytotoxicity" as used herein is meant the cell-mediated reaction, wherein nonspecific cytotoxic cells that express FcγRs recognize bound antibody on a target cell and subsequently cause lysis of the target cell. ADCC is correlated with binding to FcγRIIIa; increased binding to FcγRIIIa leads to an increase in ADCC activity.

[0391] By "ADCP" or antibody dependent cell-mediated phagocytosis as used herein is meant the cell-mediated reaction wherein nonspecific phagocytic cells that express FcγRs recognize bound antibody on a target cell and subsequently cause phagocytosis of the target cell.

[0392] As used herein, the term "antibody" is used generally. Antibodies provided herein can take on a number of formats as described herein, including traditional antibodies as well as antibody derivatives, fragments and mimetics, described herein.

[0393] Traditional immunoglobulin (Ig) antibodies are "Y" shaped tetramers. Each tetramer is typically composed of two identical pairs of polypeptide chains, each pair having one "light chain" monomer (typically having a molecular weight of about 25 kDa) and one "heavy chain" monomer (typically having a molecular weight of about 50-70 kDa).

[0394] Other useful antibody formats include, but are not limited to, the "1 + 1 Fab × scFv" (also referred to herein as the "1 + 1 Fab-scFv-Fc" or "bottle-opener" format), "1 + 1 empty × Fab-scFv" (also referred to herein as the "one-armed central-scFv" format), "2 + 1 Fab × Fab-scFv" (also referred to herein as the "2 + 1 Fab2-scFv-Fc" format), "2 + 1 Fab2 × scFv" (also referred to herein as the "2 + 1 stab Fab2-scFv-Fc" format), and "2 + 1 mAb-scFv" (also referred to herein as the "mAb-scFv" format) formats provided herein (see, e.g., Figs. 25A-25E). Additional useful antibody formats include, but are not limited to: "mAb-Fv," "central-Fv," "1 + 1 common light chain" (CLC), "2 + 1 CLC," "one-armed scFv-mAb," "scFv-mAb," "dual scFv,"

"bispecific mAb," and "trident" format antibodies as depicted in Fig. 36 of U.S. Publ. App. No. 2022/0289839, hereby incorporated by reference in its entirety and specifically for its disclosure of antibody formats.

[0395] Antibody heavy chains typically include a variable heavy (V_H) domain, which includes vhCDR1-3, and an Fc domain, which includes a CH2-CH3 monomer. In some embodiments, antibody heavy chains include a hinge and CH1 domain. Traditional antibody heavy chains are monomers that are organized, from N- to C-terminus: V_H-CH1-hinge-CH2-CH3. The CH1-hinge-CH2-CH3 is collectively referred to as the heavy chain "constant domain" or "constant region" of the antibody, of which there are five different categories or "isotypes": IgA, IgD, IgG, IgE and IgM.

[0396] In some embodiments, the antibodies provided herein include IgG isotype constant domains, which has several subclasses, including, but not limited to IgG1, IgG2, and IgG4. In the IgG subclass of immunoglobulins, there are several immunoglobulin domains in the heavy chain. By "immunoglobulin (Ig) domain" herein is meant a region of an immunoglobulin having a distinct tertiary structure. Of interest in the present invention are the heavy chain domains, including, the constant heavy (CH) domains and the hinge domains. In the context of IgG antibodies, the IgG isotypes each have three CH regions. Accordingly, "CH" domains in the context of IgG are as follows: "CH1" refers to positions 118-215 according to the EU index as in Kabat. "Hinge" refers to positions 216-230 according to the EU index as in Kabat. "CH2" refers to positions 231-340 according to the EU index as in Kabat, and "CH3" refers to positions 341-447 according to the EU index as in Kabat. As shown in Table 1, the exact numbering and placement of the heavy chain domains can be different among different numbering systems. As shown herein and described below, the pI variants can be in one or more of the CH regions, as well as the hinge region, discussed below.

[0397] It should be noted that IgG1 has different allotypes with polymorphisms at 356 (D or E) and 358 (L or M). The sequences depicted herein use the 356E/358M allotype, however the other allotype is included herein. That is, any sequence inclusive of an IgG1 Fc domain included herein can have 356D/358L replacing the 356E/358M allotype. It should be understood that therapeutic antibodies can also comprise hybrids of isotypes and/or subclasses. For example, as shown in US Publication 2009/0163699, incorporated by reference, the present antibodies, in

some embodiments, include human IgG1/G2 hybrids.

[0398] By "Fc" or "Fc region" or "Fc domain" as used herein is meant the polypeptide comprising the constant region of an antibody, in some instances, excluding all of the first constant region immunoglobulin domain (e.g., CH1) or a portion thereof, and in some cases, optionally including all or part of the hinge. For IgG, the Fc domain comprises immunoglobulin domains CH2 and CH3 (Cγ2 and Cγ3), and optionally all or a portion of the hinge region between CH1 (Cγ1) and CH2 (Cγ2). Thus, in some cases, the Fc domain includes, from N- to C-terminal, CH2-CH3 and hinge-CH2-CH3. In some embodiments, the Fc domain is that from IgG1, IgG2, or IgG4, with IgG1 hinge-CH2-CH3 and IgG4 hinge-CH2-CH3 finding particular use in many embodiments. Additionally, in the case of human IgG1 Fc domains, the hinge may include a C220S amino acid substitution. Furthermore, in the case of human IgG4 Fc domains, the hinge may include a S228P amino acid substitution. Although the boundaries of the Fc region may vary, the human IgG heavy chain Fc region is usually defined to include residues E216, C226, or A231 to its carboxyl- terminal, wherein the numbering is according to the EU index as in Kabat. In some embodiments, as is more fully described below, amino acid modifications are made to the Fc region, for example to alter binding to one or more FcγR or to the FcRn.

[0399] By "heavy chain constant region" herein is meant the CH1-hinge-CH2-CH3 portion of an antibody (or fragments thereof), excluding the variable heavy domain; in EU numbering of human IgG1 this is amino acids 118-447. By "heavy chain constant region fragment" herein is meant a heavy chain constant region that contains fewer amino acids from either or both of the N- and C-termini but still retains the ability to form a dimer with another heavy chain constant region.

[0400] Another type of domain of the heavy chain is the hinge region. By "hinge" or "hinge region" or "antibody hinge region" or "hinge domain" herein is meant the flexible polypeptide comprising the amino acids between the first and second constant domains of an antibody. Structurally, the IgG CH1 domain ends at EU position 215, and the IgG CH2 domain begins at residue EU position 231. Thus, for IgG the antibody hinge is herein defined to include positions 216 (E216 in IgG1) to 230 (P230 in IgG1), wherein the numbering is according to the EU index as in Kabat. In some cases, a "hinge fragment" is used, which contains fewer amino acids at either or both of the N- and C-termini of the hinge domain. As noted herein, pI variants can be

made in the hinge region as well. Many of the antibodies herein have at least one the cysteines at position 220 according to EU numbering (hinge region) replaced by a serine. Generally, this modification is on the "scFv monomer" side (when 1 + 1 or 2 + 1 formats are used) for most of the sequences depicted herein, although it can also be on the "Fab monomer" side, or both, to reduce disulfide formation. Specifically included within the sequences herein are one or both of these cysteines replaced (C220S).

[0401] As will be appreciated by those in the art, the exact numbering and placement of the heavy chain constant region domains (i.e., CH1, hinge, CH2 and CH3 domains) can be different among different numbering systems. A useful comparison of heavy constant region numbering according to EU and Kabat is as below, see Edelman et al., 1969, Proc Natl Acad Sci USA 63:78-85 and Kabat et al., 1991, Sequences of Proteins of Immunological Interest, 5th Ed., United States Public Health Service, National Institutes of Health, Bethesda, entirely incorporated by reference.

Table 1

	EU Numbering	Kabat Numbering
CH1	118-215	114-223
Hinge	216-230	226-243
CH2	231-340	244-360
CH3	341-447	361-478

[0402] The antibody light chain generally comprises two domains: the variable light domain (V_L), which includes light chain CDRs vlCDR1-3, and a constant light chain region (often referred to as C_L or C_K). The antibody light chain is typically organized from N- to C-terminus: V_L-C_L.

[0403] By "antigen binding domain" or "ABD" herein is meant a set of six Complementary Determining Regions (CDRs) that, when present as part of a polypeptide sequence, specifically binds a target antigen (e.g., NKp46 or MICA/B) as discussed herein. As is known in the art, these CDRs are generally present as a first set of variable heavy CDRs (vhCDRs or VHCDRs) and a second set of variable light CDRs (vlCDRs or VLCDRs), each comprising three CDRs: vhCDR1, vhCDR2, vhCDR3 variable heavy CDRs and vlCDR1, vlCDR2 and vlCDR3 vhCDR3 variable light CDRs. The CDRs are present in the variable heavy domain (vhCDR1-3) and

variable light domain (vlCDR1-3). The variable heavy domain and variable light domain form an Fv region.

[0404] The present invention provides a large number of different CDR sets. In this case, a "full CDR set" comprises the three variable light and three variable heavy CDRs, e.g., a vlCDR1, vlCDR2, vlCDR3, vhCDR1, vhCDR2 and vhCDR3. These can be part of a larger variable light or variable heavy domain, respectfully. In addition, as more fully outlined herein, the variable heavy and variable light domains can be on separate polypeptide chains, when a heavy and light chain is used (for example when Fabs are used), or on a single polypeptide chain in the case of scFv sequences.

[0405] As will be appreciated by those in the art, the exact numbering and placement of the CDRs can be different among different numbering systems. However, it should be understood that the disclosure of a variable heavy and/or variable light sequence includes the disclosure of the associated (inherent) CDRs. Accordingly, the disclosure of each variable heavy region is a disclosure of the vhCDRs (e.g., vhCDR1, vhCDR2, and vhCDR3 (sometimes referred to collectively as vhCDR1-3)) and the disclosure of each variable light region is a disclosure of the vlCDRs (e.g., vlCDR1, vlCDR2, and vlCDR3 (sometimes referred to collectively as vlCDR1-3)). A useful comparison of CDR numbering is as below, see Lafranc et al., Dev. Comp. Immunol. 27(1): 55-77 (2003).

Table 2

	Kabat +Chothia	IMGT	Kabat	AbM	Chothia	Contact	Xencor
vhCDR1	26-35	27-38	31-35	26-35	23-32	30-35	27-35
vhCDR2	50-65	56-65	50-65	50-58	52-56	47-58	54-61
vhCDR3	95-102	105-117	95-102	95-102	95-102	93-101	103-116
vlCDR1	24-34	27-38	24-34	24-34	24-34	30-36	27-38
vlCDR2	50-56	56-65	50-56	50-56	50-56	46-55	56-62
vlCDR3	89-97	105-117	89-97	89-97	89-97	89-96	97-105

[0406] Throughout the present specification, the Kabat numbering system is generally used when referring to a residue in the variable domain (approximately, residues 1-107 of the light chain variable region and residues 1-113 of the heavy chain variable region) and the EU numbering system for Fc regions (e.g., Kabat et al., supra (1991)).

[0407] The CDRs contribute to the formation of the antigen-binding, or more specifically, epitope binding site of the antigen binding domains and antibodies. "Epitope" refers to a determinant that interacts with a specific antigen binding site in the variable region of an antibody molecule known as a paratope. Epitopes are groupings of molecules such as amino acids or sugar side chains and usually have specific structural characteristics, as well as specific charge characteristics. A single antigen may have more than one epitope.

[0408] The epitope may comprise amino acid residues directly involved in the binding (also called immunodominant component of the epitope) and other amino acid residues, which are not directly involved in the binding, such as amino acid residues which are effectively blocked by the specifically antigen binding peptide; in other words, the amino acid residue is within the footprint of the specifically antigen binding peptide.

[0409] Epitopes may be either conformational or linear. A conformational epitope is produced by spatially juxtaposed amino acids from different segments of the linear polypeptide chain. A linear epitope is one produced by adjacent amino acid residues in a polypeptide chain. Conformational and non-conformational epitopes may be distinguished in that the binding to the former but not the latter is lost in the presence of denaturing solvents.

[0410] An epitope typically includes at least 3, and more usually, at least 5 or 8-10 amino acids in a unique spatial conformation. Antibodies that recognize the same epitope can be verified in a simple immunoassay showing the ability of one antibody to block the binding of another antibody to a target antigen, for example "binning." As outlined below, the invention not only includes the enumerated antigen binding domains and antibodies herein, but those that compete for binding with the epitopes bound by the enumerated antigen binding domains.

[0411] In some embodiments, the six CDRs of the antigen binding domain are contributed by a variable heavy and a variable light domain. In a "Fab" format, the set of 6 CDRs are contributed by two different polypeptide sequences, the variable heavy domain (vh, VH, or V_H; containing the vhCDR1, vhCDR2 and vhCDR3) and the variable light domain (vl, VL, or V_L; containing the vlCDR1, vlCDR2 and vlCDR3), with the C-terminus of the vh domain being attached to the N-terminus of the CH1 domain of the heavy chain and the C-terminus of the vl domain being attached to the N-terminus of the constant light domain (and thus forming the light chain). In a scFv format, the vh and vl domains are covalently attached, generally through the use of a linker

(a "scFv linker") as outlined herein, into a single polypeptide sequence, which can be either (starting from the N-terminus) vh-linker-vl or vl-linker-vh, with the former being generally preferred (including optional domain linkers on each side, depending on the format used. In general, the C-terminus of the scFv domain is attached to the N-terminus of all or part of the hinge in the second monomer.

[0412] By "variable region" or "variable domain" as used herein is meant the region of an immunoglobulin that comprises one or more Ig domains substantially encoded by any of the V_κ, V_λ, and/or V_H genes that make up the kappa, lambda, and heavy chain immunoglobulin genetic loci respectively, and contains the CDRs that confer antigen specificity. Thus, a "variable heavy domain" pairs with a "variable light domain" to form an antigen binding domain ("ABD"). In addition, each variable domain comprises three hypervariable regions ("complementary determining regions," "CDRs") (vhCDR1, vhCDR2 and vhCDR3 for the variable heavy domain and vlCDR1, vlCDR2 and vlCDR3 for the variable light domain) and four framework (FR) regions, arranged from amino-terminus to carboxy-terminus in the following order: FR1-CDR1-FR2-CDR2-FR3-CDR3-FR4.

[0413] By "Fab" or "Fab region" as used herein is meant the antibody region that comprises the V_H, CH1, V_L, and C_L immunoglobulin domains, generally on two different polypeptide chains (e.g., V_H-CH1 on one chain and V_L-C_L on the other). Fab may refer to this region in isolation, or this region in the context of a bispecific antibody of the invention. In the context of a Fab, the Fab comprises an Fv region in addition to the CH1 and C_L domains.

[0414] By "Fv" or "Fv fragment" or "Fv region" as used herein is meant the antibody region that comprises the V_L and V_H domains. Fv regions can be formatted as both Fabs (as discussed above, generally two different polypeptides that also include the constant regions as outlined above) and single chain Fvs (scFvs), where the vl and vh domains are included in a single peptide, attached generally with a linker as discussed herein.

[0415] By "single chain Fv" or "scFv" herein is meant a variable heavy domain covalently attached to a variable light domain, generally using a scFv linker as discussed herein, to form a scFv or scFv domain. A scFv domain can be in either orientation from N- to C-terminus (vh-linker-vl or vl-linker-vh). In the sequences depicted in the sequence listing and in the figures, the order of the vh and vl domain is indicated in the name, e.g., H.X L.Y means N- to C-terminal is

vh-linker-vl, and L.Y H.X is vl-linker-vh.

[0416] Some embodiments of the subject antibodies provided herein comprise at least one scFv domain, which, while not naturally occurring, generally includes a variable heavy domain and a variable light domain, linked together by a scFv linker. As outlined herein, while the scFv domain is generally from N- to C-terminus oriented as V_H-scFv linker-V_L, this can be reversed for any of the scFv domains (or those constructed using vh and vl sequences from Fabs), to V_L-scFv linker-V_H, with optional linkers at one or both ends depending on the format.

[0417] By "modification" or "variant" herein is meant an amino acid substitution, insertion, and/or deletion in a polypeptide sequence or an alteration to a moiety chemically linked to a protein. For example, a modification may be an altered carbohydrate or PEG structure attached to a protein. By "amino acid modification" herein is meant an amino acid substitution, insertion, and/or deletion in a polypeptide sequence. For clarity, unless otherwise noted, the amino acid modification is always to an amino acid coded for by DNA, e.g., the 20 amino acids that have codons in DNA and RNA.

[0418] By "amino acid substitution" or "substitution" herein is meant the replacement of an amino acid at a particular position in a parent polypeptide sequence with a different amino acid. In particular, in some embodiments, the substitution is to an amino acid that is not naturally occurring at the particular position, either not naturally occurring within the organism or in any organism. For example, the substitution E272Y refers to a variant polypeptide, in this case an Fc variant, in which the glutamic acid at position 272 is replaced with tyrosine. For clarity, a protein which has been engineered to change the nucleic acid coding sequence but not change the starting amino acid (for example exchanging CGG (encoding arginine) to CGA (still encoding arginine) to increase host organism expression levels) is not an "amino acid substitution;" that is, despite the creation of a new gene encoding the same protein, if the protein has the same amino acid at the particular position that it started with, it is not an amino acid substitution.

[0419] By "amino acid insertion" or "insertion" as used herein is meant the addition of an amino acid sequence at a particular position in a parent polypeptide sequence. For example, -233E or 233E designates an insertion of glutamic acid after position 233 and before position 234. Additionally, -233ADE or A233ADE designates an insertion of AlaAspGlu after position 233 and before position 234.

[0420] By "amino acid deletion" or "deletion" as used herein is meant the removal of an amino acid sequence at a particular position in a parent polypeptide sequence. For example, E233- or E233#, E233(), E233_ or E233del designates a deletion of glutamic acid at position 233. Additionally, EDA233- or EDA233# designates a deletion of the sequence GluAspAla that begins at position 233.

[0421] By "variant protein" or "protein variant," or "variant" as used herein is meant a protein that differs from that of a parent protein by virtue of at least one amino acid modification. The protein variant has at least one amino acid modification compared to the parent protein, yet not so many that the variant protein will not align with the parental protein using an alignment program such as that described below. In general, variant proteins (such as variant Fc domains, etc., outlined herein, are generally at least 75, 80, 85, 90, 91, 92, 93, 94, 95, 96, 97, 98 or 99% identical to the parent protein, using the alignment programs described below, such as BLAST.

[0422] "Variant" as used herein also refers to particular amino acid modifications that confer particular function (e.g., a "heterodimerization variant," "pI variant," "ablation variant," etc.).

[0423] As described below, in some embodiments the parent polypeptide, for example an Fc parent polypeptide, is a human wild-type sequence, such as the heavy constant domain or Fc region from IgG1, IgG2, or IgG4, although human sequences with variants can also serve as "parent polypeptides," for example the IgG1/2 hybrid of US Publication 2006/0134105 can be included. The protein variant sequence herein will preferably possess at least about 80% identity with a parent protein sequence, and most preferably at least about 90% identity, more preferably at least about 95-98-99% identity. Accordingly, by "antibody variant" or "variant antibody" as used herein is meant an antibody that differs from a parent antibody by virtue of at least one amino acid modification, "IgG variant" or "variant IgG" as used herein is meant an antibody that differs from a parent IgG (again, in many cases, from a human IgG sequence) by virtue of at least one amino acid modification, and "immunoglobulin variant" or "variant immunoglobulin" as used herein is meant an immunoglobulin sequence that differs from that of a parent immunoglobulin sequence by virtue of at least one amino acid modification. "Fc variant" or "variant Fc" as used herein is meant a protein comprising an amino acid modification in an Fc domain as compared to an Fc domain of human IgG1, IgG2 or IgG4.

[0424] "Fc variant" or "variant Fc" as used herein is meant a protein comprising an amino acid

modification in an Fc domain. The modification can be an addition, deletion, or substitution. The Fc variants are defined according to the amino acid modifications that compose them. Thus, for example, N434S or 434S is an Fc variant with the substitution for serine at position 434 relative to the parent Fc polypeptide, wherein the numbering is according to the EU index. Likewise, M428L/N434S defines an Fc variant with the substitutions M428L and N434S relative to the parent Fc polypeptide. The identity of the WT amino acid may be unspecified, in which case the aforementioned variant is referred to as 428L/434S. It is noted that the order in which substitutions are provided is arbitrary, that is to say that, for example, 428L/434S is the same Fc variant as 434S/428L, and so on. For all positions discussed herein that relate to antibodies or derivatives and fragments thereof (e.g., Fc domains), unless otherwise noted, amino acid position numbering is according to the EU index. The "EU index" or "EU index as in Kabat" or "EU numbering" scheme refers to the numbering of the EU antibody (Edelman et al., 1969, Proc Natl Acad Sci USA 63:78-85, hereby entirely incorporated by reference). The modification can be an addition, deletion, or substitution.

[0425] In general, variant Fc domains have at least about 80, 85, 90, 95, 96, 97, 98 or 99 percent identity to the corresponding parental human IgG Fc domain (using the identity algorithms discussed below, with one embodiment utilizing the BLAST algorithm as is known in the art, using default parameters). Alternatively, the variant Fc domains can have from 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 11, 12, 13, 14, 15, 16, 17, 18, 19 or 20 amino acid modifications as compared to the parental Fc domain. Alternatively, the variant Fc domains can have up to 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 11, 12, 13, 14, 15, 16, 17, 18, 19 or 20 amino acid modifications as compared to the parental Fc domain. Additionally, as discussed herein, the variant Fc domains described herein still retain the ability to form a dimer with another Fc domain as measured using known techniques as described herein, such as non-denaturing gel electrophoresis.

[0426] By "protein" as used herein is meant at least two covalently attached amino acids, which includes proteins, polypeptides, oligopeptides, and peptides. In addition, polypeptides that make up the antibodies of the invention may include synthetic derivatization of one or more side chains or termini, glycosylation, PEGylation, circular permutation, cyclization, linkers to other molecules, fusion to proteins or protein domains, and addition of peptide tags or labels.

[0427] By "residue" as used herein is meant a position in a protein and its associated amino acid identity. For example, Asparagine 297 (also referred to as Asn297 or N297) is a residue at position 297 in the human antibody IgG1.

[0428] By "IgG subclass modification" or "isotype modification" as used herein is meant an amino acid modification that converts one amino acid of one IgG isotype to the corresponding amino acid in a different, aligned IgG isotype. For example, because IgG1 comprises a tyrosine and IgG2 a phenylalanine at EU position 296, a F296Y substitution in IgG2 is considered an IgG subclass modification.

[0429] By "non-naturally occurring modification" as used herein is meant an amino acid modification that is not isotypic. For example, because none of the human IgGs comprise a serine at position 434, the substitution 434S in IgG1, IgG2, or IgG4 (or hybrids thereof) is considered a non-naturally occurring modification.

[0430] By "amino acid" and "amino acid identity" as used herein is meant one of the 20 naturally occurring amino acids that are coded for by DNA and RNA.

[0431] By "effector function" as used herein is meant a biochemical event that results from the interaction of an antibody Fc region with an Fc receptor or ligand. Effector functions include but are not limited to ADCC, ADCP, and CDC.

[0432] By "IgG Fc ligand" as used herein is meant a molecule, preferably a polypeptide, from any organism that binds to the Fc region of an IgG antibody to form an Fc/Fc ligand complex. Fc ligands include but are not limited to FcγRIs, FcγRIIs, FcγRIIIs, FcRn, C1q, C3, mannan binding lectin, mannose receptor, staphylococcal protein A, streptococcal protein G, and viral FcγR. Fc ligands also include Fc receptor homologs (FcRH), which are a family of Fc receptors that are homologous to the FcγRs (Davis et al., 2002, Immunological Reviews 190: 123-136, entirely incorporated by reference). Fc ligands may include undiscovered molecules that bind Fc. Particular IgG Fc ligands are FcRn and Fc gamma receptors. By "Fc ligand" as used herein is meant a molecule, preferably a polypeptide, from any organism that binds to the Fc region of an antibody to form an Fc/Fc ligand complex.

[0433] By "Fc gamma receptor," "FcγR ," "FcγR," or "FcgammaR" as used herein is meant any member of the family of proteins that bind the IgG antibody Fc region and is encoded by an

FcγR gene. In humans this family includes but is not limited to FcγRI (CD64), including isoforms FcγRIa, FcγRIb, and FcγRIc; FcγRII (CD32), including isoforms FcγRIIa (including allotypes H131 and R131), FcγRIIb (including FcγRIIb-1 and FcγRIIb-2), and FcγRIIc; and FcγRIII (CD16), including isoforms FcγRIIIa (including allotypes V158 and F158) and FcγRIIIb (including allotypes FcγRIIb-NA1 and FcγRIIb-NA2) (Jefferis et al., 2002, Immunol Lett 82:57-65, entirely incorporated by reference), as well as any undiscovered human FcγRs or FcγR isoforms or allotypes. An FcγR may be from any organism, including but not limited to humans, mice, rats, rabbits, and monkeys. Mouse FcγRs include but are not limited to FcγRI (CD64), FcγRII (CD32), FcγRIII (CD 16), and FcγRIII-2 (CD16-2), as well as any undiscovered mouse FcγRs or FcγR isoforms or allotypes.

[0434] By "FcRn" or "neonatal Fc Receptor" as used herein is meant a protein that binds the IgG antibody Fc region and is encoded at least in part by an FcRn gene. The FcRn may be from any organism, including but not limited to humans, mice, rats, rabbits, and monkeys. As is known in the art, the functional FcRn protein comprises two polypeptides, often referred to as the heavy chain and light chain. The light chain is beta-2-microglobulin and the heavy chain is encoded by the FcRn gene. Unless otherwise noted herein, FcRn or an FcRn protein refers to the complex of FcRn heavy chain with beta-2-microglobulin. A variety of FcRn variants used to increase binding to the FcRn receptor, and in some cases, to increase serum half-life. An "FcRn variant" is an amino acid modification that contributes to increased binding to the FcRn receptor, and suitable FcRn variants are shown below.

[0435] By "parent polypeptide" as used herein is meant a starting polypeptide that is subsequently modified to generate a variant. The parent polypeptide may be a naturally occurring polypeptide, or a variant or engineered version of a naturally occurring polypeptide. Accordingly, by "parent immunoglobulin" as used herein is meant an unmodified immunoglobulin polypeptide that is modified to generate a variant, and by "parent antibody" as used herein is meant an unmodified antibody that is modified to generate a variant antibody. It should be noted that "parent antibody" includes known commercial, recombinantly produced antibodies as outlined below. In this context, a "parent Fc domain" will be relative to the recited variant; thus, a "variant human IgG1 Fc domain" is compared to the parent Fc domain of human IgG1, a "variant human IgG4 Fc domain" is compared to the parent Fc domain human IgG4, etc.

[0436] By "position" as used herein is meant a location in the sequence of a protein. Positions may be numbered sequentially, or according to an established format, for example the EU index for numbering of antibody domains (e.g., a CH1, CH2, CH3 or hinge domain).

[0437] By "target antigen" as used herein is meant the molecule that is bound specifically by the antigen binding domain comprising the variable regions of a given antibody.

[0438] By "strandedness" in the context of the monomers of the heterodimeric antibodies of the invention herein is meant that, similar to the two strands of DNA that "match," heterodimerization variants are incorporated into each monomer so as to preserve the ability to "match" to form heterodimers. For example, if some pI variants are engineered into monomer A (e.g., making the pI higher) then steric variants that are "charge pairs" that can be utilized as well do not interfere with the pI variants, e.g., the charge variants that make a pl higher are put on the same "strand" or "monomer" to preserve both functionalities. Similarly, for "skew" variants that come in pairs of a set as more fully outlined below, the skilled artisan will consider pI in deciding into which strand or monomer one set of the pair will go, such that pI separation is maximized using the pI of the skews as well.

[0439] By "target cell" as used herein is meant a cell that expresses a target antigen.

[0440] By "host cell" in the context of producing a bispecific antibody according to the invention herein is meant a cell that contains the exogeneous nucleic acids encoding the components of the bispecific antibody and is capable of expressing the bispecific antibody under suitable conditions. Suitable host cells are discussed below.

[0441] By "wild-type" or "WT" herein is meant an amino acid sequence or a nucleotide sequence that is found in nature, including allelic variations. A WT protein has an amino acid sequence or a nucleotide sequence that has not been intentionally modified.

[0442] Provided herein are a number of antibody domains (e.g., Fc domains) that have sequence identity to human antibody domains. Sequence identity between two similar sequences (e.g., antibody variable domains) can be measured by algorithms such as that of Smith, T.F. & Waterman, M.S. (1981) "Comparison Of Biosequences," Adv. Appl. Math. 2:482 [local homology algorithm]; Needleman, S.B. & Wunsch, CD. (1970) "A General Method Applicable To The Search For Similarities In The Amino Acid Sequence Of Two Proteins," J. Mol.

Biol.48:443 [homology alignment algorithm], Pearson, W.R. & Lipman, D.J. (1988) "Improved Tools For Biological Sequence Comparison," Proc. Natl. Acad. Sci. (U.S.A.) 85:2444 [search for similarity method]; or Altschul, S.F. et al, (1990) "Basic Local Alignment Search Tool," J. Mol. Biol. 215:403-10 , the "BLAST" algorithm, see https://blast.ncbi.nlm.nih.gov/Blast.cgi. When using any of the aforementioned algorithms, the default parameters (for Window length, gap penalty, etc.) are used. In one embodiment, sequence identity is done using the BLAST algorithm, using default parameters.

[0443] The antibodies of the present invention are generally isolated or recombinant. "Isolated," when used to describe the various polypeptides disclosed herein, means a polypeptide that has been identified and separated and/or recovered from a cell or cell culture from which it was expressed. Ordinarily, an isolated polypeptide will be prepared by at least one purification step. An "isolated antibody," refers to an antibody which is substantially free of other antibodies having different antigenic specificities. "Recombinant" means the antibodies are generated using recombinant nucleic acid techniques in exogeneous host cells, and they can be isolated as well.

[0444] "Specific binding" or "specifically binds to" or is "specific for" a particular antigen or an epitope means binding that is measurably different from a non-specific interaction. Specific binding can be measured, for example, by determining binding of a molecule compared to binding of a control molecule, which generally is a molecule of similar structure that does not have binding activity. For example, specific binding can be determined by competition with a control molecule that is similar to the target.

[0445] Specific binding for a particular antigen or an epitope can be exhibited, for example, by an antibody having a K_D for an antigen or epitope of at least about 10^{-4} M, at least about 10^{-5} M, at least about 10^{-6} M, at least about 10^{-7} M, at least about 10^{-8} M, at least about 10^{-9} M, alternatively at least about 10^{-10} M, at least about 10^{-11} M, at least about 10^{-12} M, or greater, where K_D refers to a dissociation rate of a particular antibody-antigen interaction. Typically, an antibody that specifically binds an antigen will have a K_D that is 20-, 50-, 100-, 500-, 1000-, 5,000-, 10,000- or more times greater for a control molecule relative to the antigen or epitope.

[0446] Also, specific binding for a particular antigen or an epitope can be exhibited, for example, by an antibody having a K_A or K_a for an antigen or epitope of at least 20-, 50-, 100-, 500-, 1000-, 5,000-, 10,000- or more times greater for the epitope relative to a control, where K_A

or K_a refers to an association rate of a particular antibody-antigen interaction. Binding affinity is generally measured using a Biacore, SPR or BLI assay.

[0447] As used herein, the singular forms "a," "an," and "the" include plural referents unless the context clearly dictates otherwise. Thus, for example, reference to "an antigen" includes mixtures of antigens; reference to "a pharmaceutically acceptable carrier" includes mixtures of two or more such carriers, and the like. As such, the terms "a" (or "an"), "one or more," and "at least one" can be used interchangeably herein.

[0448] Furthermore, "and/or" where used herein is to be taken as specific disclosure of each of the two specified features or components with or without the other. Thus, the term "and/or" as used in a phrase such as "A and/or B" herein is intended to include "A and B," "A or B," "A (alone)," and "B (alone)".

[0449] As used herein, the term "about" a value (or parameter) refers to, for example, ±1%, ±2%, ±3%, ±4%, ±5%, 6%, ±7%, ±8%, ±9%, ±10% and the like of a stated value. When referring to a range of values (or parameters), the term "about" refers to +10% of the upper limit and -10% of the lower limit of a stated range of values. When a range of values is provided, it is to be understood that each intervening value between the upper and lower limit of that range, and any other stated or intervening value in that stated range, is encompassed within the scope of the present disclosure. Where the stated range includes upper and/or lower limits, ranges excluding either of those included limits are also included in the present disclosure.

IV. Antigen Binding Domains

[0450] In another aspect, provided herein are anti-NKp46 × anti-MICA/B (also referred to herein as "αNKp46 × αMICA/B," "anti-MICA/B × anti-NKp46," and "αMICA/B × αNKp46") bispecific antibodies. Such antibodies include at least one NKp46 binding domain and at least one MICA/B binding domain.

[0451] Note that unless specified herein, the order of the antigen list in the name does not confer structure. That is to say, for example, an anti-NKp46 × anti-MICA/B 1 + 1 Fab-scFv-Fc antibody can have the scFv bind to NKp46 or MICA/B, although, in some cases, the order specifies structure as indicated.

[0452] As is more fully outlined herein, these combinations of antigen binding domains (ABDs)

can be in a variety of formats, as outlined below, generally in combinations where one ABD is in a Fab format and the other is in an scFv format. Exemplary formats that are used in the bispecific antibodies provided herein include the 1 + 1 Fab × scFv, 1 + 1 empty × Fab-scFv, 2 + 1 Fab × Fab-scFv, 2 + 1 Fab2 × scFv, and 2 + 1 mAb-scFv formats (see, e.g., Figs. 25A-25E). Other useful antibody formats include, but are not limited to, "mAb-Fv," "central-Fv," "1 + 1 common light chain" (CLC), "2 + 1 CLC," "one-armed scFv-mAb," "scFv-mAb," "dual scFv," "bispecific mAb," and "trident" format antibodies as depicted in Fig. 36 of U.S. Publ. App. No. 2022/0289839, hereby incorporated by reference in its entirety and specifically for its disclosure of antibody formats.

[0453] In addition, generally, one of the ABDs comprises a scFv as outlined herein, in an orientation from N- to C-terminus of V_H-scFv linker-V_L or V_L-scFv linker-V_H. One or both of the other ABDs, according to the format, generally is a Fab, comprising a V_H domain on one protein chain (generally as a component of a heavy chain) and a V_L on another protein chain (generally as a component of a light chain).

[0454] As will be appreciated by those in the art, any set of 6 CDRs or V_H and V_L domains can be in the scFv format or in the Fab format, which is then added to the heavy and light constant domains, where the heavy constant domains comprise variants (including within the CH1 domain, as well as the Fc domain). The scFv sequences contained in the sequence listing utilize a particular charged linker, but as outlined herein, uncharged or other charged linkers can be used, including those depicted in Fig. 8 (see, e.g., SEQ ID NOs: XXX-XXX).

[0455] In addition, as discussed above, the numbering used in the sequence listing for the identification of the CDRs is Kabat; however, different numbering can be used, which will change the amino acid sequences of the CDRs as shown in Table 2.

[0456] For all of the variable heavy and light domains listed herein, further variants can be made. As outlined herein, in some embodiments, the set of 6 CDRs can have 0, 1, 2, 3, 4, or 5 amino acid modifications (with amino acid substitutions finding particular use), as well as changes in the framework regions of the variable heavy and light domains, as long as the frameworks (excluding the CDRs) retain at least about 80%, about 85%, about 90%, about 95%, or about 99% identity to a human germline sequence selected from those listed in Fig. 1 of U.S. Pat. No. 7,657,380, which Figure and Legend is incorporated by reference in its entirety herein.

Thus, for example, the identical CDRs as described herein can be combined with different framework sequences from human germline sequences, as long as the framework regions retain at least about 80%, about 85%, about 90%, about 95%, or about 99% identity to a human germline sequence selected from those listed in Fig. 1 of U.S. Pat. No. 7,657,380. Alternatively, the CDRs can have amino acid modifications (e.g., from 1, 2, 3, 4, or 5 amino acid modifications in the set of CDRs (that is, the CDRs can be modified as long as the total number of changes in the set of 6 CDRs is less than 6 amino acid modifications, with any combination of CDRs being changed; e.g., there may be one change in vlCDR1, two in vhCDR2, none in vhCDR3, etc.)), as well as having framework region changes, as long as the framework regions retain at least about 80%, about 85%, about 90%, about 95%, or about 99% identity to a human germline sequence selected from those listed in Fig. 1 of U.S. Pat. No. 7,657,380.

[0457] As discussed herein, the subject heterodimeric antibodies include two ABDs, each of which binds to NKp46 or MICA/B. As outlined herein, these heterodimeric antibodies can be bispecific and bivalent (each antigen is bound by a single ABD, for example, in the format depicted in Fig. 25), or bispecific and trivalent (one antigen is bound by a single ABD and the other is bound by two ABDs, for example, in the format depicted in Fig. 25).

A. MICA/B Antigen Binding Domains

[0458] Herein is provided monoclonal and bispecific antibodies (e.g., the anti-NKp46 × anti-MICA/B antibodies provided herein), and fusion proteins that contain ABDs that bind to MICA/B. Suitable sets of 6 CDRs (vhCDR1-3 and vlCDR1-3; see, e.g., SEQ ID NOs: XXX-XXX and XXX-XXX, respectively) and/or V_H and V_L domains (see, e.g., SEQ ID NOs: XXX and XXX, respectively) are depicted in Figs. 21 and 22. In some embodiments, the heterodimeric antibody is a 1 + 1 Fab × scFv, 1 + 1 empty × Fab-scFv, 2 + 1 Fab × Fab-scFv, 2 + 1 Fab2 × scFv, or 2 + 1 mAb-scFv format antibody (see, e.g., Figs. 25 and 31-35).

[0459] In some embodiments, the MICA/B ABD has a set of vhCDRs selected from the vhCDR1, vhCDR2, and vhCDR3 sequences from a V_H selected from the group including: (i) D94837_1E11_1 [MICA/B]_H0 (SEQ ID NO: XXX), (ii) D94837_1E11_1 [MICA/B]_H1 (SEQ ID NO: XXX), (iii) D94837_1E11_1 [MICA/B]_H2 (SEQ ID NO: XXX), (iv) 2E5 [MICA/B]_H0 (SEQ ID NO: XXX), (v) 2E5 [MICA/B]_H1 (SEQ ID NO: XXX), (vi) 2E5

[MICA/B]_H2 (SEQ ID NO: XXX), (vii) D94852_2E12 [MICA/B]_H0 (SEQ ID NO: XXX), (viii) D94852_2E12 [MICA/B]_H1 (SEQ ID NO: XXX), (ix) D94852_2E12 [MICA/B]_H2 (SEQ ID NO: XXX), (x) D99136_2F7 [MICA/B]_H0 (SEQ ID NO: XXX), (xi) D99136_2F7 [MICA/B]_H1 (SEQ ID NO: XXX), (xii) D99136_2F7 [MICA/B]_H2 (SEQ ID NO: XXX), (xiii) D103388_1C7 [MICA/B]_H0 (SEQ ID NO: XXX), (xiv) D103388_1C7 [MICA/B]_H1 (SEQ ID NO: XXX), (xv) D103388_1C7 [MICA/B]_H2 (SEQ ID NO: XXX), (xvi) D103388_1D7 [MICA/B]_H0 (SEQ ID NO: XXX), (xvii) D103388_1D7 [MICA/B]_H1 (SEQ ID NO: XXX), (xviii) D103388_1D7 [MICA/B]_H2 (SEQ ID NO: XXX), (xix) D105317_1A2 [MICA/B]_H0 (SEQ ID NO: XXX), (xx) D105317_1A2 [MICA/B]_H1 (SEQ ID NO: XXX), (xxi) D105317_1A2 [MICA/B]_H2 (SEQ ID NO: XXX), (xxii) D99136_2C11 [MICA/B]_H0 (SEQ ID NO: XXX), (xxiii) D99136_2C11 [MICA/B]_H1 (SEQ ID NO: XXX), (xxiv) D99136_2C11 [MICA/B]_H2 (SEQ ID NO: XXX), (xxv) D103388_1B11-2 [MICA/B]_H0 (SEQ ID NO: XXX), (xxvi) D105317_1B6 [MICA/B]_H0 (SEQ ID NO: XXX), (xxvii) D105317_1C8 [MICA/B]_H0 (SEQ ID NO: XXX), (xxviii) D105317_1F6 [MICA/B]_H0 (SEQ ID NO: XXX), (xxix) D105317_1F7 [MICA/B]_H0 (SEQ ID NO: XXX), (xxx) D94837_1D3 [MICA/B]_H0 (SEQ ID NO: XXX), (xxxi) D94837_1D8 [MICA/B]_H0 (SEQ ID NO: XXX), (xxxii) D94837_1D9 [MICA/B]_H0 (SEQ ID NO: XXX), (xxxiii) D94837_1E1 [MICA/B]_H0 (SEQ ID NO: XXX), (xxxiv) D94852_2D4 [MICA/B]_H0 (SEQ ID NO: XXX), (xxxv) D94852_2G8 [MICA/B]_H0 (SEQ ID NO: XXX), (xxxvi) D88487_2A8 [MICA/B]_H0 (SEQ ID NO: XXX), (xxxvii) D94837_3B12 [MICA/B]_H0 (SEQ ID NO: XXX), (xxxviii) D99122_1H7 [MICA/B]_H0 (SEQ ID NO: XXX), (xxxix) D99136_2E8 [MICA/B]_H0 (SEQ ID NO: XXX), (xl) D88487_2A8 [MICA/B]_H0 (SEQ ID NO: XXX), (xli) 3F9[MICA/B]_H0 (SEQ ID NO: XXX), (xlii) 6E1[MICA/B]_H0 (SEQ ID NO: XXX), (xliii) 7C6[MICA/B]_H0 (SEQ ID NO: XXX), (xliv) 13A9 [MICA/B]_H0 (SEQ ID NO: XXX), and (xlv) 1D5 [MICA/B]_H0 (SEQ ID NO: XXX), as shown in Figs. 21 and 22. In some embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94837_1E11_1 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94837_1E11_1 [MICA/B]_H1). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94837_1E11_1 [MICA/B]_H2). In other embodiments, the vhCDR1, vhCDR2,

and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in 2E5 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in 2E5 [MICA/B]_H1). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in 2E5 [MICA/B]_H2). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94852_2E12 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94852_2E12 [MICA/B]_H1). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94852_2E12 [MICA/B]_H2). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D99136_2F7 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D99136_2F7 [MICA/B]_H1). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D99136_2F7 [MICA/B]_H2). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D103388_1C7 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D103388_1C7 [MICA/B]_H1). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D103388_1C7 [MICA/B]_H2). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D103388_1D7 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D103388_1D7 [MICA/B]_H1). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D103388_1D7 [MICA/B]_H2). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D105317_1A2 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3

sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D105317_1A2 [MICA/B]_H1). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D105317_1A2 [MICA/B]_H2). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D99136_2C11 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D99136_2C11 [MICA/B]_H1). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D99136_2C11 [MICA/B]_H2). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D103388_1B11-2 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D105317_1B6 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D105317_1C8 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D105317_1F6 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D105317_1F7 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94837_1D3 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94837_1D8 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94837_1D9 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94837_1E1 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94852_2D4 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in

D94852_2G8 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D88487_2A8 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94837_3B12 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D99122_1H7 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D99136_2E8 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D88487_2A8 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in 3F9[MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in 6E1[MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in 7C6[MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in 13A9 [MICA/B]_H0). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in 1D5 [MICA/B]_H0).

[0460] In some embodiments, the V_H domain of the MICA/B ABD is selected from the group the group including: (i) D94837_1E11_1 [MICA/B]_H0 (SEQ ID NO: XXX), (ii) D94837_1E11_1 [MICA/B]_H1 (SEQ ID NO: XXX), (iii) D94837_1E11_1 [MICA/B]_H2 (SEQ ID NO: XXX), (iv) 2E5 [MICA/B]_H0 (SEQ ID NO: XXX), (v) 2E5 [MICA/B]_H1 (SEQ ID NO: XXX), (vi) 2E5 [MICA/B]_H2 (SEQ ID NO: XXX), (vii) D94852_2E12 [MICA/B]_H0 (SEQ ID NO: XXX), (viii) D94852_2E12 [MICA/B]_H1 (SEQ ID NO: XXX), (ix) D94852_2E12 [MICA/B]_H2 (SEQ ID NO: XXX), (x) D99136_2F7 [MICA/B]_H0 (SEQ ID NO: XXX), (xi) D99136_2F7 [MICA/B]_H1 (SEQ ID NO: XXX), (xii) D99136_2F7 [MICA/B]_H2 (SEQ ID NO: XXX), (xiii) D103388_1C7 [MICA/B]_H0 (SEQ ID NO: XXX), (xiv) D103388_1C7 [MICA/B]_H1 (SEQ ID NO: XXX), (xv) D103388_1C7 [MICA/B]_H2 (SEQ ID NO: XXX), (xvi) D103388_1D7 [MICA/B]_H0 (SEQ ID NO: XXX), (xvii)

D103388_1D7 [MICA/B]_H1 (SEQ ID NO: XXX), (xviii) D103388_1D7 [MICA/B]_H2 (SEQ ID NO: XXX), (xix) D105317_1A2 [MICA/B]_H0 (SEQ ID NO: XXX), (xx) D105317_1A2 [MICA/B]_H1 (SEQ ID NO: XXX), (xxi) D105317_1A2 [MICA/B]_H2 (SEQ ID NO: XXX), (xxii) D99136_2C11 [MICA/B]_H0 (SEQ ID NO: XXX), (xxiii) D99136_2C11 [MICA/B]_H1 (SEQ ID NO: XXX), (xxiv) D99136_2C11 [MICA/B]_H2 (SEQ ID NO: XXX), (xxv) D103388_1B11-2 [MICA/B]_H0 (SEQ ID NO: XXX), (xxvi) D105317_1B6 [MICA/B]_H0 (SEQ ID NO: XXX), (xxvii) D105317_1C8 [MICA/B]_H0 (SEQ ID NO: XXX), (xxviii) D105317_1F6 [MICA/B]_H0 (SEQ ID NO: XXX), (xxix) D105317_1F7 [MICA/B]_H0 (SEQ ID NO: XXX), (xxx) D94837_1D3 [MICA/B]_H0 (SEQ ID NO: XXX), (xxxi) D94837_1D8 [MICA/B]_H0 (SEQ ID NO: XXX), (xxxii) D94837_1D9 [MICA/B]_H0 (SEQ ID NO: XXX), (xxxiii) D94837_1E1 [MICA/B]_H0 (SEQ ID NO: XXX), (xxxiv) D94852_2D4 [MICA/B]_H0 (SEQ ID NO: XXX), (xxxv) D94852_2G8 [MICA/B]_H0 (SEQ ID NO: XXX), (xxxvi) D88487_2A8 [MICA/B]_H0 (SEQ ID NO: XXX), (xxxvii) D94837_3B12 [MICA/B]_H0 (SEQ ID NO: XXX), (xxxviii) D99122_1H7 [MICA/B]_H0 (SEQ ID NO: XXX), (xxxix) D99136_2E8 [MICA/B]_H0 (SEQ ID NO: XXX), (xl) D88487_2A8 [MICA/B]_H0 (SEQ ID NO: XXX), (xli) 3F9[MICA/B]_H0 (SEQ ID NO: XXX), (xlii) 6E1[MICA/B]_H0 (SEQ ID NO: XXX), (xliii) 7C6[MICA/B]_H0 (SEQ ID NO: XXX), (xliv) 13A9 [MICA/B]_H0 (SEQ ID NO: XXX), and (xlv) 1D5 [MICA/B]_H0 (SEQ ID NO: XXX), as shown in Figs. 21 and 22.

[0461] In some embodiments, the MICA/B ABD has a set of vlCDRs selected from the vlCDR1, vlCDR2, and vlCDR3 sequences from a V_L selected from the group including: (i) D94837_1E11_1 [MICA/B]_L0 (SEQ ID NO: XXX), (ii) D94837_1E11_1 [MICA/B]_L1 (SEQ ID NO: XXX), (iii) D94837_1E11_1 [MICA/B]_L2 (SEQ ID NO: XXX), (iv) 2E5 [MICA/B]_L0 (SEQ ID NO: XXX), (v) 2E5 [MICA/B]_L1 (SEQ ID NO: XXX), (vi) 2E5 [MICA/B]_L2 (SEQ ID NO: XXX), (vii) D94852_2E12 [MICA/B]_L0 (SEQ ID NO: XXX), (viii) D94852_2E12 [MICA/B]_L1 (SEQ ID NO: XXX), (ix) D94852_2E12 [MICA/B]_L2 (SEQ ID NO: XXX), (x) D99136_2F7 [MICA/B]_L0 (SEQ ID NO: XXX), (xi) D99136_2F7 [MICA/B]_L1 (SEQ ID NO: XXX), (xii) D99136_2F7 [MICA/B]_L2 (SEQ ID NO: XXX), (xiii) D103388_1C7 [MICA/B]_L0 (SEQ ID NO: XXX), (xiv) D103388_1C7 [MICA/B]_L1 (SEQ ID NO: XXX), (xv) D103388_1C7 [MICA/B]_L2 (SEQ ID NO: XXX), (xvi) D103388_1D7 [MICA/B]_L0 (SEQ ID NO: XXX), (xvii) D103388_1D7 [MICA/B]_L1 (SEQ ID NO: XXX), (xviii) D103388_1D7 [MICA/B]_L2 (SEQ ID NO: XXX), (xix) D105317_1A2

[MICA/B]_L0 (SEQ ID NO: XXX), (xx) D105317_1A2 [MICA/B]_L1 (SEQ ID NO: XXX), (xxi) D105317_1A2 [MICA/B]_L2 (SEQ ID NO: XXX), (xxii) D99136_2C11 [MICA/B]_L0 (SEQ ID NO: XXX), (xxiii) D99136_2C11 [MICA/B]_L1 (SEQ ID NO: XXX), (xxiv) D99136_2C11 [MICA/B]_L2 (SEQ ID NO: XXX), (xxv) D103388_1B11-2 [MICA/B]_L0 (SEQ ID NO: XXX), (xxvi) D105317_1B6 [MICA/B]_L0 (SEQ ID NO: XXX), (xxvii) D105317_1C8 [MICA/B]_L0 (SEQ ID NO: XXX), (xxviii) D105317_1F6 [MICA/B]_L0 (SEQ ID NO: XXX), (xxix) D105317_1F7 [MICA/B]_L0 (SEQ ID NO: XXX), (xxx) D94837_1D3 [MICA/B]_L0 (SEQ ID NO: XXX), (xxxi) D94837_1D8 [MICA/B]_L0 (SEQ ID NO: XXX), (xxxii) D94837_1D9 [MICA/B]_L0 (SEQ ID NO: XXX), (xxxiii) D94837_1E1 [MICA/B]_L0 (SEQ ID NO: XXX), (xxxiv) D94852_2D4 [MICA/B]_L0 (SEQ ID NO: XXX), (xxxv) D94852_2G8 [MICA/B]_L0 (SEQ ID NO: XXX), (xxxvi) D88487_2A8 [MICA/B]_L0 (SEQ ID NO: XXX), (xxxvii) D94837_3B12 [MICA/B]_L0 (SEQ ID NO: XXX), (xxxviii) D99122_1H7 [MICA/B]_L0 (SEQ ID NO: XXX), (xxxix) D99136_2E8 [MICA/B]_L0 (SEQ ID NO: XXX), (xl) D88487_2A8 [MICA/B]_L0 (SEQ ID NO: XXX), (xli) 3F9[MICA/B]_L0 (SEQ ID NO: XXX), (xlii) 6E1[MICA/B]_L0 (SEQ ID NO: XXX), (xliii) 7C6[MICA/B]_L0 (SEQ ID NO: XXX), (xliv) 13A9 [MICA/B]_L0 (SEQ ID NO: XXX), and (xlv) 1D5 [MICA/B]_L0 (SEQ ID NO: XXX), as shown in Figs. 21 and 22. In some embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94837_1E11_1 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94837_1E11_1 [MICA/B]_L1). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94837_1E11_1 [MICA/B]_L2). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in 2E5 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in 2E5 [MICA/B]_L1). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in 2E5 [MICA/B]_L2). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94852_2E12 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as,

for example, in D94852_2E12 [MICA/B]_L1). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94852_2E12 [MICA/B]_L2). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D99136_2F7 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D99136_2F7 [MICA/B]_L1). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D99136_2F7 [MICA/B]_L2). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D103388_1C7 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D103388_1C7 [MICA/B]_L1). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D103388_1C7 [MICA/B]_L2). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D103388_1D7 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D103388_1D7 [MICA/B]_L1). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D103388_1D7 [MICA/B]_L2). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D105317_1A2 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D105317_1A2 [MICA/B]_L1). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D105317_1A2 [MICA/B]_L2). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D99136_2C11 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D99136_2C11 [MICA/B]_L1). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3

sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D99136_2C11 [MICA/B]_L2). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D103388_1B11-2 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D105317_1B6 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D105317_1C8 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D105317_1F6 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D105317_1F7 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94837_1D3 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94837_1D8 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94837_1D9 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94837_1E1 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94852_2D4 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94852_2G8 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D88487_2A8 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D94837_3B12 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D99122_1H7 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in

D99136_2E8 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in D88487_2A8 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in 3F9[MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in 6E1[MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in 7C6[MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in 13A9 [MICA/B]_L0). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the MICA/B ABD are SEQ ID NOs: XXX-XXX (such as, for example, in 1D5 [MICA/B]_L0).

[0462] In some embodiments, the V_L of the MICA/B ABD is selected from the group including: (i) D94837_1E11_1 [MICA/B]_L0 (SEQ ID NO: XXX), (ii) D94837_1E11_1 [MICA/B]_L1 (SEQ ID NO: XXX), (iii) D94837_1E11_1 [MICA/B]_L2 (SEQ ID NO: XXX), (iv) 2E5 [MICA/B]_L0 (SEQ ID NO: XXX), (v) 2E5 [MICA/B]_L1 (SEQ ID NO: XXX), (vi) 2E5 [MICA/B]_L2 (SEQ ID NO: XXX), (vii) D94852_2E12 [MICA/B]_L0 (SEQ ID NO: XXX), (viii) D94852_2E12 [MICA/B]_L1 (SEQ ID NO: XXX), (ix) D94852_2E12 [MICA/B]_L2 (SEQ ID NO: XXX), (x) D99136_2F7 [MICA/B]_L0 (SEQ ID NO: XXX), (xi) D99136_2F7 [MICA/B]_L1 (SEQ ID NO: XXX), (xii) D99136_2F7 [MICA/B]_L2 (SEQ ID NO: XXX), (xiii) D103388_1C7 [MICA/B]_L0 (SEQ ID NO: XXX), (xiv) D103388_1C7 [MICA/B]_L1 (SEQ ID NO: XXX), (xv) D103388_1C7 [MICA/B]_L2 (SEQ ID NO: XXX), (xvi) D103388_1D7 [MICA/B]_L0 (SEQ ID NO: XXX), (xvii) D103388_1D7 [MICA/B]_L1 (SEQ ID NO: XXX), (xviii) D103388_1D7 [MICA/B]_L2 (SEQ ID NO: XXX), (xix) D105317_1A2 [MICA/B]_L0 (SEQ ID NO: XXX), (xx) D105317_1A2 [MICA/B]_L1 (SEQ ID NO: XXX), (xxi) D105317_1A2 [MICA/B]_L2 (SEQ ID NO: XXX), (xxii) D99136_2C11 [MICA/B]_L0 (SEQ ID NO: XXX), (xxiii) D99136_2C11 [MICA/B]_L1 (SEQ ID NO: XXX), (xxiv) D99136_2C11 [MICA/B]_L2 (SEQ ID NO: XXX), (xxv) D103388_1B11-2 [MICA/B]_L0 (SEQ ID NO: XXX), (xxvi) D105317_1B6 [MICA/B]_L0 (SEQ ID NO: XXX), (xxvii) D105317_1C8 [MICA/B]_L0 (SEQ ID NO: XXX), (xxviii) D105317_1F6 [MICA/B]_L0 (SEQ ID NO: XXX), (xxix) D105317_1F7 [MICA/B]_L0 (SEQ ID NO: XXX), (xxx) D94837_1D3

[MICA/B]_L0 (SEQ ID NO: XXX), (xxxi) D94837_1D8 [MICA/B]_L0 (SEQ ID NO: XXX), (xxxii) D94837_1D9 [MICA/B]_L0 (SEQ ID NO: XXX), (xxxiii) D94837_1E1 [MICA/B]_L0 (SEQ ID NO: XXX), (xxxiv) D94852_2D4 [MICA/B]_L0 (SEQ ID NO: XXX), (xxxv) D94852_2G8 [MICA/B]_L0 (SEQ ID NO: XXX), (xxxvi) D88487_2A8 [MICA/B]_L0 (SEQ ID NO: XXX), (xxxvii) D94837_3B12 [MICA/B]_L0 (SEQ ID NO: XXX), (xxxviii) D99122_1H7 [MICA/B]_L0 (SEQ ID NO: XXX), (xxxix) D99136_2E8 [MICA/B]_L0 (SEQ ID NO: XXX), (xl) D88487_2A8 [MICA/B]_L0 (SEQ ID NO: XXX), (xli) 3F9[MICA/B]_L0 (SEQ ID NO: XXX), (xlii) 6E1[MICA/B]_L0 (SEQ ID NO: XXX), (xliii) 7C6[MICA/B]_L0 (SEQ ID NO: XXX), (xliv) 13A9 [MICA/B]_L0 (SEQ ID NO: XXX), and (xlv) 1D5 [MICA/B]_L0 (SEQ ID NO: XXX), as shown in Figs. 21 and 22.

[0463] Accordingly, included herein are MICA/B ABDs that have a set of 6 CDRs (i.e., vhCDR1-3 and vlCDR1-3) from V_H/V_L pairs selected from the group including: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, respectively, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, respectively, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, respectively, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, respectively, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, respectively, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, respectively, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, respectively, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, respectively, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, respectively, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, respectively, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12

[MICA/B]_H0_D94852_2E12 [MICA/B]_L0, respectively, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12
[MICA/B]_H1_D94852_2E12 [MICA/B]_L1, respectively, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12
[MICA/B]_H1_D94852_2E12 [MICA/B]_L2, respectively, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12
[MICA/B]_H2_D94852_2E12 [MICA/B]_L1, respectively, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12
[MICA/B]_H2_D94852_2E12 [MICA/B]_L2, respectively, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7
[MICA/B]_H0_D99136_2F7 [MICA/B]_L0, respectively, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7
[MICA/B]_H1_D99136_2F7 [MICA/B]_L1, respectively, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7
[MICA/B]_H1_D99136_2F7 [MICA/B]_L2, respectively, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7
[MICA/B]_H2_D99136_2F7 [MICA/B]_L1, respectively, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7
[MICA/B]_H2_D99136_2F7 [MICA/B]_L2, respectively, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7
[MICA/B]_H0_D103388_1C7 [MICA/B]_L0, respectively, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7
[MICA/B]_H1_D103388_1C7 [MICA/B]_L1, respectively, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7
[MICA/B]_H1_D103388_1C7 [MICA/B]_L2, respectively, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7
[MICA/B]_H2_D103388_1C7 [MICA/B]_L1, respectively, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7
[MICA/B]_H2_D103388_1C7 [MICA/B]_L2, respectively, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7
[MICA/B]_H0_D103388_1D7 [MICA/B]_L0, respectively, (xxvii) SEQ ID NOs: XXX-XXX

for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, respectively, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, respectively, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, respectively, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, respectively, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, respectively, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, respectively, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, respectively, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, respectively, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, respectively, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, respectively, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, respectively, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, respectively, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, respectively, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, respectively, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, respectively, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6

[MICA/B]_H0_D105317_1B6 [MICA/B]_L0, respectively, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8
[MICA/B]_H0_D105317_1C8 [MICA/B]_L0, respectively, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6
[MICA/B]_H0_D105317_1F6 [MICA/B]_L0, respectively, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7
[MICA/B]_H0_D105317_1F7 [MICA/B]_L0, respectively, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3
[MICA/B]_H0_D94837_1D3 [MICA/B]_L0, respectively, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8
[MICA/B]_H0_D94837_1D8 [MICA/B]_L0, respectively, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9
[MICA/B]_H0_D94837_1D9 [MICA/B]_L0, respectively, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1
[MICA/B]_H0_D94837_1E1 [MICA/B]_L0, respectively, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4
[MICA/B]_H0_D94852_2D4 [MICA/B]_L0, respectively, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8
[MICA/B]_H0_D94852_2G8 [MICA/B]_L0, respectively, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8
[MICA/B]_H0_D88487_2A8 [MICA/B]_L0, respectively, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12
[MICA/B]_H0_D94837_3B12 [MICA/B]_L0, respectively, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7
[MICA/B]_H0_D99122_1H7 [MICA/B]_L0, respectively, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8
[MICA/B]_H0_D99136_2E8 [MICA/B]_L0, respectively, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8
[MICA/B]_H0_D88487_2A8 [MICA/B]_L0, respectively, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, respectively, (lviii) SEQ ID NOs: XXX-XXX for

vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, respectively, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, respectively, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, respectively, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, respectively, as are generally shown in Figs. 21 and 22.

[0464] Additionally, included herein are MICA/B ABDs that have V_H/V_L pairs selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, respectively, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, respectively, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, respectively, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, respectively, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, respectively, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, respectively, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, respectively, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, respectively, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, respectively, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, respectively, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, respectively, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, respectively, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, respectively, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, respectively, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, respectively, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, respectively, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, respectively, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, respectively, (xix) SEQ ID Nos:

XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, respectively, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, respectively, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, respectively, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, respectively, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, respectively, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, respectively, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, respectively, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, respectively, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, respectively, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, respectively, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, respectively, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, respectively, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, respectively, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, respectively, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, respectively, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, respectively, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, respectively, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, respectively, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, respectively, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, respectively, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, respectively, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, respectively, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, respectively, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6

[MICA/B]_H0_D105317_1B6 [MICA/B]_L0, respectively, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, respectively, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, respectively, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, respectively, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, respectively, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, respectively, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, respectively, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, respectively, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, respectively, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, respectively, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, respectively, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, respectively, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, respectively, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, respectively, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, respectively, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, respectively, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, respectively, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, respectively, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, respectively, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, respectively, as are generally shown in Figs. 21 and 22.

[0465] In particular embodiments, the V_H/V_L pairs used in scFvs are selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, respectively, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, respectively, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, respectively, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, respectively, (v) SEQ ID Nos: XXX and XXX

for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, respectively, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, respectively, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, respectively, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, respectively, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, respectively, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, respectively, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, respectively, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, respectively, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, respectively, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, respectively, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, respectively, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, respectively, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, respectively, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, respectively, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, respectively, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, respectively, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, respectively, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, respectively, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, respectively, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, respectively, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, respectively, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, respectively, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, respectively, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, respectively, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, respectively, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7

[MICA/B]_H2_D103388_1D7 [MICA/B]_L2, respectively, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, respectively, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, respectively, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, respectively, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, respectively, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, respectively, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, respectively, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, respectively, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, respectively, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, respectively, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, respectively, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, respectively, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, respectively, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, respectively, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, respectively, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, respectively, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, respectively, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, respectively, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, respectively, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, respectively, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, respectively, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, respectively, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, respectively, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, respectively, (liv) SEQ ID Nos: XXX and XXX

for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, respectively, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, respectively, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, respectively, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, respectively, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, respectively, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, respectively, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, respectively, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, respectively, as are generally shown in Figs. 21 and 22.

[0466] In particular embodiments, the V_H/V_L pairs used in Fabs are selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, respectively, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, respectively, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, respectively, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, respectively, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, respectively, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, respectively, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, respectively, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, respectively, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, respectively, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, respectively, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, respectively, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, respectively, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, respectively, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, respectively, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, respectively, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, respectively, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, respectively, (xviii) SEQ ID Nos: XXX and XXX

for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, respectively, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, respectively, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, respectively, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, respectively, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, respectively, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, respectively, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, respectively, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, respectively, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, respectively, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, respectively, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, respectively, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, respectively, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, respectively, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, respectively, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, respectively, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, respectively, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, respectively, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, respectively, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, respectively, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, respectively, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, respectively, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, respectively, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, respectively, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0,

respectively, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, respectively, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, respectively, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, respectively, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, respectively, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, respectively, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, respectively, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, respectively, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, respectively, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, respectively, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, respectively, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, respectively, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, respectively, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, respectively, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, respectively, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, respectively, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, respectively, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, respectively, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, respectively, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, respectively, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, respectively, as are generally shown in Figs. 21 and 22.

[0467] As will be appreciated by those in the art, suitable MICA/B binding domains can comprise a set of 6 CDRs as depicted in the Figures, either as they are underlined or, in the case where a different numbering scheme is used, as described herein and as shown in Table 2, as the CDRs that are identified using other alignments within the V_H and V_L sequences of those depicted in Figs. 21 and 22. Suitable ABDs can also include the entire V_H and V_L sequences as depicted in these sequences and Figures, used as scFvs or as Fabs. In many of the embodiments

herein that contain an Fv to MICA/B, it is the scFv monomer that binds MICA/B. However, in many other embodiments herein that contain an Fv to MICA/B, it is the Fab monomer that binds MICA/B.

[0468] In addition to the parental CDR sets disclosed in the figures and sequence listing that form an ABD to MICA/B, provided herein are variant MICA/B ABDs having CDRs that include at least one modification of the MICA/B ABD CDRs disclosed herein (see, e.g., Figs. 21 and 22). In one embodiment, the MICA/B ABD of the subject heterodimeric antibody includes a set of 6 CDRS with 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acid modifications as compared to the 6 CDRs of a MICA/B binding domain V_H/V_L pair as described herein, including the figures and sequence listing. In exemplary embodiments, the MICA/B ABD of the subject heterodimeric antibody includes a set of 6 CDRs with 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acid modifications as compared to the 6 CDRs of one of the following MICA/B binding domain V_H/V_L pairs: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, respectively, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, respectively, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, respectively, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, respectively, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, respectively, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, respectively, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, respectively, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, respectively, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, respectively, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, respectively, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, respectively, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, respectively, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, respectively, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, respectively, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, respectively, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, respectively,

(xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, respectively, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, respectively, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, respectively, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, respectively, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, respectively, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, respectively, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, respectively, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, respectively, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, respectively, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, respectively, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, respectively, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, respectively, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, respectively, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, respectively, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, respectively, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, respectively, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, respectively, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, respectively, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, respectively, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, respectively, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, respectively, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, respectively, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, respectively, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11

[MICA/B]_H2_D99136_2C11 [MICA/B]_L2, respectively, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, respectively, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, respectively, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, respectively, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, respectively, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, respectively, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, respectively, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, respectively, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, respectively, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, respectively, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, respectively, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, respectively, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, respectively, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, respectively, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, respectively, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, respectively, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, respectively, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, respectively, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, respectively, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, respectively, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, respectively, or (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, respectively. In certain embodiments, the MICA/B ABD of the subject antibody is capable of binding to MICA, as measured by at least one of: (i) a Biacore assay, (ii) a surface plasmon resonance (SPR) assay, (iii) a biolayer interferometry (BLI) assay (e.g., an Octet assay), (iv) flow cytometry, or any combination thereof. In particular embodiments, the MICA/B ABD is capable of binding a human MICA antigen (see, e.g., Fig. 1; SEQ ID NOs: XXX-XXX). In particular embodiments, the MICA/B ABD is capable of binding

the extracellular domain (ECD) of a human MICA antigen (see, e.g., Fig. 1; SEQ ID NOs: XXX-XXX). In certain embodiments, the MICA/B ABD of the subject antibody is capable of binding to MICB, as measured by at least one of: (i) a Biacore assay, (ii) a surface plasmon resonance (SPR) assay, (iii) a biolayer interferometry (BLI) assay (e.g., an Octet assay), (iv) flow cytometry, or any combination thereof. In particular embodiments, the MICA/B ABD is capable of binding a human MICB antigen (see, e.g., Fig. 2; SEQ ID NO: XXX-XXX). In particular embodiments, the MICA/B ABD is capable of binding the extracellular domain (ECD) of a human MICB antigen (see, e.g., Fig. 2; SEQ ID NO: XXX-XXX).

[0469] In another exemplary embodiment, the MICA/B ABD of the subject antibody includes the variable heavy (V_H) domain and variable light (V_L) domain of any one of the MICA/B binding domain V_H/V_L pairs described herein, including the figures and sequence listing.

[0470] In some embodiments, the subject antibody includes a MICA/B ABD that includes a variable heavy domain and/or a variable light domain that are variants of a MICA/B ABD V_H and/or V_L domain disclosed herein. In one embodiment, the variant V_H domain and/or variant V_L domain has from 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acid changes from a V_H and/or V_L domain of a MICA/B ABD described herein, including the figures and sequence listing. In exemplary embodiments, the variant V_H domain and/or variant V_L domain has from 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 amino acid changes from a V_H and/or V_L domain of one of the following MICA/B binding domain V_H/V_L pairs: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, respectively, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, respectively, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, respectively, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, respectively, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, respectively, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, respectively, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, respectively, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, respectively, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, respectively, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, respectively, (xi) SEQ ID Nos: XXX and

XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, respectively, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, respectively, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, respectively, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, respectively, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, respectively, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, respectively, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, respectively, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, respectively, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, respectively, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, respectively, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, respectively, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, respectively, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, respectively, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, respectively, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, respectively, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, respectively, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, respectively, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, respectively, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, respectively, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, respectively, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, respectively, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, respectively, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, respectively, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, respectively, (xxxv)

SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, respectively, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, respectively, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, respectively, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, respectively, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, respectively, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, respectively, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, respectively, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, respectively, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, respectively, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, respectively, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, respectively, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, respectively, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, respectively, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, respectively, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, respectively, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, respectively, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, respectively, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, respectively, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, respectively, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, respectively, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, respectively, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, respectively, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, respectively, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, respectively, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0,

respectively, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, respectively, or (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, respectively. In some embodiments, the changes are in a V_H domain depicted in Figs. 21 and 22 (see, e.g., SEQ ID NOs: XXX-XXX). In some embodiments, the changes are in a V_L domain depicted in Figs. 21 and 22 (see, e.g., SEQ ID NOs: XXX-XXX). In some embodiments, the changes are in a V_H and V_L domain depicted in Figs. 21 and 22 (see, e.g., SEQ ID NOs: XXX-XXX). In some embodiments, one or more amino acid changes are in the V_H and/or V_L framework regions (FR1, FR2, FR3, and/or FR4). In some embodiments, one or more amino acid changes are in one or more CDRs. In certain embodiments, the (variant) MICA/B ABD of the subject antibody is capable of binding to MICA, as measured by at least one of: (i) a Biacore assay, (ii) a SPR assay, (iii) a BLI assay (e.g., an Octet assay), (iv) flow cytometry, or any combination thereof. In particular embodiments, the (variant) MICA/B ABD is capable of binding a human MICA antigen (see, e.g., Fig. 1; SEQ ID NOs: XXX-XXX). In particular embodiments, the (variant) MICA/B ABD is capable of binding the ECD of a human MICA antigen (see, e.g., Fig. 1; SEQ ID NOs: XXX-XXX). In certain embodiments, the (variant) MICA/B ABD of the subject antibody is capable of binding to MICB, as measured by at least one of: (i) a Biacore assay, (ii) a SPR assay, (iii) a BLI assay (e.g., an Octet assay), (iv) flow cytometry, or any combination thereof. In particular embodiments, the (variant) MICA/B ABD is capable of binding a human MICB antigen (see, e.g., Fig. 2; SEQ ID NOs: XXX-XXX). In particular embodiments, the (variant) MICA/B ABD is capable of binding the ECD of a human MICB antigen (see, e.g., Fig. 2; SEQ ID NOs: XXX-XXX).

[0471] In one embodiment, the variant V_H and/or V_L domain is at least about 90%, about 95%, about 96%, about 97%, about 98%, or about 99% identical to the V_H and/or V_L of a MICA/B ABD as described herein, including the figures and sequence listing. In exemplary embodiments, the variant V_H and/or V_L domain is at least about 90%, about 95%, about 96%, about 97%, about 98%, or about 99% identical to the V_H and/or V_L of one of the following MICA/B binding domain V_H/V_L pairs: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, respectively, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, respectively, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, respectively, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1

[MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, respectively, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, respectively, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, respectively, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, respectively, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, respectively, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, respectively, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, respectively, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, respectively, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, respectively, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, respectively, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, respectively, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, respectively, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, respectively, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, respectively, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, respectively, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, respectively, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, respectively, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, respectively, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, respectively, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, respectively, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, respectively, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, respectively, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, respectively, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, respectively, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, respectively, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1,

respectively, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, respectively, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, respectively, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, respectively, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, respectively, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, respectively, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, respectively, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, respectively, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, respectively, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, respectively, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, respectively, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, respectively, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, respectively, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, respectively, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, respectively, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, respectively, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, respectively, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, respectively, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, respectively, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, respectively, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, respectively, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, respectively, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, respectively, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, respectively, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12

[MICA/B]_H0_D94837_3B12 [MICA/B]_L0, respectively, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, respectively, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, respectively, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, respectively, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, respectively, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, respectively, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, respectively, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, respectively, or (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, respectively. In some embodiments, the (variant) MICA/B ABD includes a V_H that is at least about 90%, about 95%, about 96%, about 97%, about 98%, or about 99% identical to a V_H domain depicted in Figs. 21 and 22 (see, e.g., SEQ ID NOs: XXX-XXX). In some embodiments, the (variant) MICA/B ABD includes a V_L that is at least about 90%, about 95%, about 96%, about 97%, about 98%, or about 99% identical to a V_L domain depicted in Figs. 21 and 22 (see, e.g., SEQ ID NOs: XXX-XXX). In some embodiments, the (variant) MICA/B ABD include a V_H and/or a V_L that is at least about 90%, about 95%, about 96%, about 97%, about 98%, or about 99% identical to a V_H domain and/or a V_L domain depicted in Figs. 21 and 22 (see, e.g., SEQ ID NOs: XXX-XXX). In certain embodiments, the (variant) MICA/B ABD of the subject antibody is capable of binding to MICA as measured by at least one of: (i) a Biacore assay, (ii) a SPR assay, (iii) a BLI assay (e.g., an Octet assay), (iv) flow cytometry, or any combination thereof. In particular embodiments, the (variant) MICA/B ABD is capable of binding a human MICA antigen (see, e.g., Fig. 1; SEQ ID NOs: XXX-XXX). In particular embodiments, the (variant) MICA/B ABD is capable of binding the ECD of a human MICA antigen (see, e.g., Fig. 1; SEQ ID NOs: XXX-XXX). In certain embodiments, the (variant) MICA/B ABD of the subject antibody is capable of binding to MICB as measured by at least one of: (i) a Biacore assay, (ii) a SPR assay, (iii) a BLI assay (e.g., an Octet assay), (iv) flow cytometry, or any combination thereof. In particular embodiments, the (variant) MICA/B ABD is capable of binding a human MICB antigen (see, e.g., Fig. 2; SEQ ID NOs: XXX-XXX). In particular embodiments, the (variant) MICA/B ABD is capable of binding the ECD of a human MICB antigen (see, e.g., Fig. 2; SEQ ID NOs: XXX-XXX).

B. NKp46 Antigen Binding Domains

[0472] Herein is provided monoclonal and bispecific antibodies (e.g., the anti-NKp46 × anti-MICA/B antibodies provided herein), and fusion proteins that contain ABDs that bind to NKp46. Suitable sets of 6 CDRs (vhCDR1-3 and vlCDR1-3; see, e.g., SEQ ID NOs: XXX-XXX and XXX-XXX, respectively) and/or V_H and V_L domains (see, e.g., SEQ ID NOs: XXX and XXX, respectively) are depicted in Figs. 23 and 24. In some embodiments, the heterodimeric antibody is a 1 + 1 Fab × scFv, 1 + 1 empty × Fab-scFv, 2 + 1 Fab × Fab-scFv, 2 + 1 Fab2 × scFv, or 2 + 1 mAb-scFv format antibody (see, e.g., Figs. 25 and 31-35).

[0473] In some embodiments, the NKp46 ABD has a set of vhCDRs selected from the vhCDR1, vhCDR2, and vhCDR3 sequences from a V_H selected from the group including: (i) 2C10A3.372[NKp46]_H1 (SEQ ID NO: XXX), and (ii) NKp46-A[NKp46]_H (SEQ ID NO: XXX), as shown in Figs. 23 and 24. In some embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the NKp46 ABD are SEQ ID NOs: XXX-XXX (such as, for example, in 2C10A3.372[NKp46]_H1). In other embodiments, the vhCDR1, vhCDR2, and vhCDR3 sequences of the NKp46 ABD are SEQ ID NOs: XXX-XXX (such as, for example, in NKp46-A[NKp46]_H).

[0474] In some embodiments, the V_H domain of the NKp46 ABD is selected from the group including: (i) 2C10A3.372[NKp46]_H1 (SEQ ID NO: XXX), and (ii) NKp46-A[NKp46]_H (SEQ ID NO: XXX), as shown in Figs. 23 and 24.

[0475] In some embodiments, the NKp46 ABD has a set of vlCDRs selected from the vlCDR1, vlCDR2, and vlCDR3 sequences from a V_L selected from the group including: (i) 2C10A3.372[NKp46]_L1 (SEQ ID NO: XXX), and (ii) NKp46-A[NKp46]_L (SEQ ID NO: XXX), as shown in Figs. 23 and 24. In some embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the NKp46 ABD are SEQ ID NOs: XXX-XXX (such as, for example, in 2C10A3.372[NKp46]_L1). In other embodiments, the vlCDR1, vlCDR2, and vlCDR3 sequences of the NKp46 ABD are SEQ ID NOs: XXX-XXX (such as, for example, in NKp46-A[NKp46]_L).

[0476] In some embodiments, the V_L domain of the NKp46 ABD is selected from the group including: (i) 2C10A3.372[NKp46]_L1 (SEQ ID NO: XXX), and (ii) NKp46-A[NKp46]_L

(SEQ ID NO: XXX), as shown in Figs. 23 and 24.

[0477] Accordingly, included herein are NKp46 ABDs that have a set of 6 CDRs (i.e., vhCDR1, vhCDR2, vhCDR3, vlCDR1, vlCDR2, and vlCDR3) from V_H/V_L pairs selected from the group including: (i) SEQ ID Nos: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, respectively, and (ii) SEQ ID Nos: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, respectively, as are generally shown in Figs. 23 and 24.

[0478] Additionally, included herein are NKp46 ABDs that have V_H/V_L pairs selected from the group including: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, respectively, and (ii) SEQ ID NOs: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, respectively, as are generally shown in Figs. 23 and 24.

[0479] In particular embodiments, the V_H/V_L pairs used in scFvs are selected from the group including: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, respectively, and (ii) SEQ ID NOs: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, respectively, as are generally shown in Figs. 23 and 24.

[0480] In particular embodiments, the V_H/V_L pairs used in Fabs are selected from the group including: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, respectively, and (ii) SEQ ID NOs: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, respectively, as are generally shown in Figs. 23 and 24.

[0481] As will be appreciated by those in the art, suitable NKp46 binding domains can comprise a set of 6 CDRs as depicted in the Figures, either as they are underlined or, in the case where a different numbering scheme is used, as described herein and as shown in Table 2, as the CDRs that are identified using other alignments within the V_H and V_L sequences of those depicted in Figs. 23 and 24. Suitable ABDs can also include the entire V_H and V_L sequences as depicted in these sequences and Figures, used as scFvs or as Fabs. In many of the embodiments herein that contain an Fv to NKp46, it is the scFv monomer that binds NKp46. However, in many other embodiments herein that contain an Fv to NKp46, it is the Fab monomer that binds NKp46.

[0482] In addition to the parental CDR sets disclosed in the figures and sequence listing that form an ABD to NKp46, provided herein are variant NKp46 ABDs having CDRs that include at least one modification of the NKp46 ABD CDRs disclosed herein (see, e.g., Figs. 23 and 24). In one embodiment, the NKp46 ABD of the subject heterodimeric antibody includes a set of 6 CDRS with 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acid modifications as compared to the 6 CDRs of a NKp46 binding domain V_H/V_L pair as described herein, including the figures and sequence listing. In exemplary embodiments, the NKp46 ABD of the subject heterodimeric antibody includes a set of 6 CDRs with 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acid modifications as compared to the 6 CDRs of one of the following NKp46 binding domain V_H/V_L pairs: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, respectively, or (ii) SEQ ID NOs: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, respectively. In certain embodiments, the (variant) NKp46 ABD of the subject antibody is capable of binding to NKp46, as measured by at least one of: (i) a Biacore assay, (ii) a surface plasmon resonance (SPR) assay, (iii) a biolayer interferometry (BLI) assay (e.g., an Octet assay), (iv) flow cytometry, or any combination thereof. In particular embodiments, the (variant) NKp46 ABD is capable of binding a human NKp46 antigen (see, e.g., Fig. 3; SEQ ID NO: XXX). In particular embodiments, the (variant) NKp46 ABD is capable of binding the extracellular domain (ECD) of a human NKp46 antigen (see, e.g., Fig. 3; SEQ ID NO: XXX).

[0483] In another exemplary embodiment, the NKp46 ABD of the subject antibody includes the variable heavy (V_H) domain and variable light (V_L) domain of any one of the NKp46 binding domain V_H/V_L pairs described herein, including the figures and sequence listing

[0484] In some embodiments, the subject antibody includes a NKp46 ABD that includes a variable heavy domain and/or a variable light domain that are variants of a NKp46 ABD V_H and/or V_L domain disclosed herein. In one embodiment, the variant V_H domain and/or variant V_L domain has from 1, 2, 3, 4, 5, 6, 7, 8, 9, or 10 amino acid changes from a V_H and/or V_L domain of a NKp46 ABD described herein, including the figures and sequence listing. In exemplary embodiments, the variant V_H domain and/or variant V_L domain has from 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 amino acid changes from a V_H and/or V_L domain of one of the following NKp46 binding domain V_H/V_L pairs: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, respectively, or (ii) SEQ ID NOs: XXX

and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, respectively. In some embodiments, the changes are in a V_H domain depicted in Figs. 23 and 24 (see, e.g., SEQ ID NOs: XXX). In some embodiments, the changes are in a V_L domain depicted in Figs. 23 and 24 (see, e.g., SEQ ID NOs: XXX). In some embodiments, the changes are in a V_H and V_L domain depicted in Figs. 23 and 24 (see, e.g., SEQ ID NOs: XXX). In some embodiments, one or more amino acid changes are in the V_H and/or V_L framework regions (FR1, FR2, FR3, and/or FR4). In some embodiments, one or more amino acid changes are in one or more CDRs. In certain embodiments, the (variant) NKp46 ABD of the subject antibody is capable of binding to NKp46, as measured by at least one of: (i) a Biacore assay, (ii) a surface plasmon resonance (SPR) assay, (iii) a biolayer interferometry (BLI) assay (e.g., an Octet assay), (iv) flow cytometry, or any combination thereof. In particular embodiments, the (variant) NKp46 ABD is capable of binding a human NKp46 antigen (see, e.g., Fig. 3; SEQ ID NO: XXX). In particular embodiments, the (variant) NKp46 ABD is capable of binding the extracellular domain (ECD) of a human NKp46 antigen (see, e.g., Fig. 3; SEQ ID NO: XXX).

[0485] In one embodiment, the variant V_H and/or V_L domain is at least about 90%, about 95%, about 96%, about 97%, about 98%, or about 99% identical to the V_H and/or V_L of a NKp46 ABD as described herein, including the figures and sequence listing. In exemplary embodiments, the variant V_H and/or V_L domain is at least about 90%, about 95%, about 96%, about 97%, about 98%, or about 99% identical to the V_H and/or V_L of one of the following NKp46 binding domain V_H/V_L pairs: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, respectively, or (ii) SEQ ID NOs: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, respectively. In some embodiments, the (variant) NKp46 ABD includes a V_H that is at least about 90%, about 95%, about 96%, about 97%, about 98%, or about 99% identical to a V_H domain depicted in Figs. 23 and 24 (see, e.g., SEQ ID NOs: XXX). In some embodiments, the (variant) NKp46 ABD includes a V_L that is at least about 90%, about 95%, about 96%, about 97%, about 98%, or about 99% identical to a V_L domain depicted in Figs. 23 and 24 (see, e.g., SEQ ID NOs: XXX). In some embodiments, the (variant) NKp46 ABD include a V_H and/or a V_L that is at least about 90%, about 95%, about 96%, about 97%, about 98%, or about 99% identical to a V_H domain and/or a V_L domain depicted in Figs. 23 and 24 (see, e.g., SEQ ID NOs: XXX). In certain embodiments, the (variant) NKp46 ABD of the subject antibody is capable of binding to NKp46, as measured by at least one

of: (i) a Biacore assay, (ii) a surface plasmon resonance (SPR) assay, (iii) a biolayer interferometry (BLI) assay (e.g., an Octet assay), (iv) flow cytometry, or any combination thereof. In particular embodiments, the (variant) NKp46 ABD is capable of binding a human NKp46 antigen (see, e.g., Fig. 3; SEQ ID NO: XXX). In particular embodiments, the (variant) NKp46 ABD is capable of binding the extracellular domain (ECD) of a human NKp46 antigen (see, e.g., Fig. 3; SEQ ID NO: XXX).

C. Linkers

[0486] As shown herein, there are a number of suitable linkers (for use as either domain linkers or scFv linkers) that can be used to covalently attach the recited domains (e.g., scFvs, Fabs, Fc domains, etc.), including traditional peptide bonds, generated by recombinant techniques. Exemplary linkers to attach domains of the subject antibody to each other are depicted in Fig. 9. In some embodiments, the linker peptide may predominantly include the following amino acid residues: Gly, Ser, Ala, or Thr. The linker peptide should have a length that is adequate to link two molecules in such a way that they assume the correct conformation relative to one another so that they retain the desired activity. In one embodiment, the linker is from about 1 to 50 amino acids in length, preferably about 1 to 30 amino acids in length. In one embodiment, linkers of 1 to 20 amino acids in length may be used, with from about 5 to about 10 amino acids finding use in some embodiments. Useful linkers include glycine-serine polymers, including for example (GS)n (SEQ ID NO: XXX), (GSGGS)n (SEQ ID NO: XXX), (GGGGS)n (SEQ ID NO: XXX), and (GGGS)n (SEQ ID NO: XXX), where n is an integer of at least one (and generally from 3 to 4), glycine-alanine polymers, alanine-serine polymers, and other flexible linkers, some of which are shown in Fig. 9. Alternatively, a variety of nonproteinaceous polymers, including but not limited to polyethylene glycol (PEG), polypropylene glycol, polyoxyalkylenes, or copolymers of polyethylene glycol and polypropylene glycol, may find use as linkers.

[0487] Other linker sequences may include any sequence of any length of C_L/CH1 domain but not all residues of C_L/CH1 domain; for example, the first 5-12 amino acid residues of the C_L/CH1 domains. Linkers can be derived from immunoglobulin light chain, for example Cκ or Cλ. Linkers can be derived from immunoglobulin heavy chains of any isotype, including for example Cγ1, Cγ2, Cγ3, Cγ4, Cα1, Cα2, Cδ, Cε, and Cμ. Linker sequences may also be derived from other proteins such as Ig-like proteins (e.g., TCR, FcR, KIR), hinge region-derived

sequences, and other natural sequences from other proteins.

[0488]] In some embodiments, the linker is a "domain linker," used to link any two domains as outlined herein together. For example, in Fig. 9 there may be a domain linker that attaches the C-terminus of a CH1 domain of a Fab to the N-terminus of a scFv, with another optional domain linker attaching the C-terminus of the scFv to a CH2 domain (although in many embodiments the hinge is used as this domain linker). While any suitable linker can be used, many embodiments utilize a glycine-serine polymer as the domain linker, including for example (GS)n (SEQ ID NO: XXX), (GSGGS)n (SEQ ID NO: XXX), (GGGGS)n (SEQ ID NO: XXX), and (GGGS)n (SEQ ID NO: XXX), where n is an integer of at least one (and generally from 3 to 4 to 5) as well as any peptide sequence that allows for recombinant attachment of the two domains with sufficient length and flexibility to allow each domain to retain its biological function. In some cases, and with attention being paid to "strandedness," as outlined below, charged domain linkers, as used in some embodiments of scFv linkers can be used. Exemplary useful domain linkers are depicted in Fig. 9.

[0489] With particular reference to the domain linker used to attach the scFv domain to the Fc domain in the "2 + 1" format, there are several domain linkers that find particular use, including "full hinge C220S variant," "flex half hinge," "charged half hinge 1," and "charged half hinge 2" as shown in Fig. 9.

[0490] In some embodiments, the linker is a "scFv linker," used to covalently attach the V_H and V_L domains as discussed herein. In many cases, the scFv linker is a charged scFv linker, a number of which are shown in Fig. 8. Accordingly, in some embodiments, the antibodies described herein further provide charged scFv linkers, to facilitate the separation in pI between a first and a second monomer. That is, by incorporating a charged scFv linker, either positive or negative (or both, in the case of scaffolds that use scFvs on different monomers), this allows the monomer comprising the charged linker to alter the pI without making further changes in the Fc domains. These charged linkers can be substituted into any scFv containing standard linkers. Again, as will be appreciated by those in the art, charged scFv linkers are used on the correct "strand" or monomer, according to the desired changes in pI. For example, as discussed herein, to make 1 + 1 Fab-scFv-Fc format heterodimeric antibody, the original pI of the Fv region for each of the desired antigen binding domains are calculated, and one is chosen to make an scFv,

and depending on the pI, either positive or negative linkers are chosen.

[0491] Charged domain linkers can also be used to increase the pI separation of the monomers of the antibodies described herein as well, and thus those included in Fig. 9 can be used in any embodiment herein where a linker is utilized.

V. Antibodies

[0492] The antibodies provided herein include different antibody domains as is more fully described above. As described herein and known in the art, the antibodies include different domains within the heavy and light chains, which can be overlapping as well. These domains include, but are not limited to, the Fc domain, the CH1 domain, the CH2 domain, the CH3 domain, the hinge domain, the heavy constant domain (CH1-hinge-Fc domain or CH1-hinge-CH2-CH3), the variable heavy domain, the variable light domain, the light constant domain, Fab domains and scFv domains. It should be noted that the term "Fc domain" includes both the CH2-CH3 (and optionally the hinge, hinge-CH2-CH3) of a single monomer, as well as the dimer of two Fc domains that self-assemble. That is, the heavy chain of an antibody has an Fc domain that is a single polypeptide, while the assembled bispecific antibody has an Fc domain that contains two polypeptides. Various antibody domains included in the bispecific, heterodimeric antibodies are more fully described below.

[0493] In particular, the formats depicted in Figs. 25A-25E are usually referred to as "heterodimeric antibodies," meaning that the protein has at least two associated Fc sequences self-assembled into a heterodimeric Fc domain and at least two Fv regions, whether as Fabs or as scFvs.

[0494] Described below are useful variant Fc domains that include amino acid modifications (i.e., substitutions, insertions, or deletions) to enhance FcγR-mediated cytotoxicity, increase serum half-life, and facilitate the self-assembly and/or purification of the heterodimeric antibodies provided. Also, exemplary anti-NKp46 × anti-MICA/B bispecific antibodies that include such variant Fc domains are described below and set forth in the Figures and the corresponding sequences.

A. Chimeric and Humanized Antibodies

[0495] In certain embodiments, the antibodies described herein comprise a heavy chain variable region from a particular germline heavy chain immunoglobulin gene and/or a light chain variable region from a particular germline light chain immunoglobulin gene. For example, such antibodies may comprise or consist of a human antibody comprising heavy or light chain variable regions that are "the product of" or "derived from" a particular germline sequence. A human antibody that is "the product of" or "derived from" a human germline immunoglobulin sequence can be identified as such by comparing the amino acid sequence of the human antibody to the amino acid sequences of human germline immunoglobulins and selecting the human germline immunoglobulin sequence that is closest in sequence (i.e., greatest % identity) to the sequence of the human antibody (using the methods outlined herein). A human antibody that is "the product of" or "derived from" a particular human germline immunoglobulin sequence may contain amino acid differences as compared to the germline sequence, due to, for example, naturally-occurring somatic mutations or intentional introduction of site-directed mutation. However, a humanized antibody typically is at least 90% identical in amino acids sequence to an amino acid sequence encoded by a human germline immunoglobulin gene and contains amino acid residues that identify the antibody as being derived from human sequences when compared to the germline immunoglobulin amino acid sequences of other species (e.g., murine germline sequences). In certain cases, a humanized antibody may be at least 95, 96, 97, 98 or 99%, or even at least 96%, 97%, 98%, or 99% identical in amino acid sequence to the amino acid sequence encoded by the germline immunoglobulin gene. Typically, a humanized antibody derived from a particular human germline sequence will display no more than 10-20 amino acid differences from the amino acid sequence encoded by the human germline immunoglobulin gene (prior to the introduction of any skew, pI and ablation variants herein; that is, the number of variants is generally low, prior to the introduction of the variants described herein). In certain cases, the humanized antibody may display no more than 5, or even no more than 4, 3, 2, or 1 amino acid difference from the amino acid sequence encoded by the germline immunoglobulin gene (again, prior to the introduction of any skew, pI and ablation variants herein; that is, the number of variants is generally low, prior to the introduction of the variants described herein). In some embodiments, the amino acid differences are in one or more of the 6 CDRs. In some

embodiments, the amino acid differences are in a V_H and/or V_L framework region.

[0496] In one embodiment, the parent antibody has been affinity matured, as is known in the art. Structure-based methods may be employed for humanization and affinity maturation, for example as described in U.S. Ser. No. 11/004,590. Selection based methods may be employed to humanize and/or affinity mature antibody variable regions, including but not limited to methods described in Wu et al., 1999, J. Mol. Biol. 294:151-162; Baca et al., 1997, J. Biol. Chem. 272(16):10678-10684; Rosok et al., 1996, J. Biol. Chem. 271(37): 22611-22618; Rader et al., 1998, Proc. Natl. Acad. Sci. USA 95: 8910-8915; Krauss et al., 2003, Protein Engineering 16(10):753-759, all entirely incorporated by reference. Other humanization methods may involve the grafting of only parts of the CDRs, including but not limited to methods described in U.S. Ser. No. 09/810,510; Tan et al., 2002, J. Immunol. 169:1119-1125; De Pascalis et al., 2002, J. Immunol. 169:3076-3084, all entirely incorporated by reference.

B. Fc Variants for Increasing Antibody-Dependent Cellular Cytotoxicity (ADCC)

[0497] There are a number of useful Fc substitutions that can be made to alter binding to one or more of the FcγR receptors. Substitutions that result in increased binding (or in some cases, decreased binding) can be useful. For example, it is known that increased binding to FcγRIIIa can result in increased ADCC (antibody dependent cell-mediated cytotoxicity). In some instances, decreased binding to FcγRIIb (an inhibitory receptor) can be beneficial as well. Amino acid substitutions that find use in the present invention include those listed in U.S. Ser. No. 11/124,620 (particularly Figure 41), U.S. Ser. Nos. 11/174,287, 11/396,495, 11/538,406, all of which are expressly incorporated herein by reference in their entirety and specifically for the variants disclosed therein.

[0498] In some embodiments, provided herein are bispecific antibodies containing Fc variants that increase antibody-dependent cellular cytotoxicity (ADCC; the cell-mediated reaction wherein nonspecific cytotoxic cells that express FcγRs recognize bound antibody on a target cell and subsequently cause lysis of the target cell) activity of the antibodies. In other words, the heterodimeric antibodies encompassed by the disclosure herein include amino acid substitutions in each or both of the Fc monomeric domains of a parental sequence, usually IgG1, that can enhance ADCC.

[0499] In some embodiments, the Fc ADCC variants (e.g., ADCC-enhanced Fc variants) comprise amino acid substitution(s) selected from the group including: E333A, K334A, S239D, S239E, I332D, I332E, S239D/I332E, S239E/I332E, S239D/I332D, S239E/I332D, S239D/A330L/I332E, S239D/A330L, A330L/I332E, F243L, F243L/R292P/Y300L/V305I/P396L, I332E/P247I/A339Q, S298A/E333A, S298A/E333A/K334A, V264I/I332E, S298A, S298A/I332E, S239Q/I332E, D265G, Y296Q, S298T, L328I/I332E, V264T, V266I, S239D/I332N, S239E/I332N, S239E/I332Q, S239N/I332E, S239Q/I332D, K326E, A330Y/I332E, V264I/A330Y/I332E, A330L/I332E, V264I/A330L/I332E, L234D, L234E, L234I, L235D, L235T, A330F, L328V/I332E, S239Q/V264I/I332E, S239E/V264I/A330Y/I332E, K274R, N276Y, S324T, K334I, K334F, L234I/L235D, L235D/S239D/A330Y/I332E, S239D/V240I/A330Y/I332E, S239D/V264T/A330Y/I332E, S239D/K326E/A330Y/I332E, S239D/K326T/A330Y/I332E, E298R, S324G, E272R, P227G, G236S, D221K, H224E, K246H, D249Y, R255Y, E258H, T260H, G281D, E283H, E283L, V284E, S239D/3272I/I332E, S239D/E272Y/A330L/I332E, S239D/E272I/A330L/I332E, S239D/K274E/I332E, S239D/K326T/I332E, S239D/K326E/I332E and S239D/K274E/A330L/I332E, according to EU numbering. In some embodiments, the amino acid substitution(s) present in an Fc ADCC variants are selected from the group including: E333A, K334A, S239D, S239E, I332D, I332E, S239D/I332E, S239E/I332E, S239D/I332D, S239E/I332D, S239D/A330L/I332E, S239D/A330L, A330L/I332E, S239D/I332N, S239N/I332D, A330Y/I332E, A330L/I332E, L328V/I332E, L328T/I332E, S239Q/V264I/I332E, S239E/V264I/A330Y/I332E, L235D/S239D/A330Y/I332E, S239D/V240I/A330Y/I332E, S239D/V264T/A330Y/I332E, S239D/K326E/A330Y/I32E, S234D/K326T/A330Y/I332E, E274R, P227G, G236S, D221K, H224E, K246H, D249Y, R255Y, E258H, E258Y, T260H, E283H, E283L, V284E, S239D/3272I/I332E, S239D/E272Y/A330L/I332E, S239D/E272I/A330L/I332E, S239D/K274E/I332E, S239D/K326T/I332E, S239D/K326E/I332E and S239D/K274E/A330L/I332E, according to EU numbering.

[0500] In some embodiments, a first Fc domain and/or a second Fc domain of the bispecific antibody provided comprise an Fc ADCC variant selected from the group including: E333A, K334A, S298A/E333A, S298A/E333A/K334A, S239D, S239E, I332D, I332E, S239D/I332E, S239E/I332E, S239D/I332D, S239E/I332D, S239D/A330L/I332E, S239D/A330L, A330L/I332E, S239D/I332N, S239N/I332D, A330Y/I332E, A330L/I332E, L328V/I332E,

L328T/I332E, S239Q/V264I/I332E, S239E/V264I/A330Y/I332E, L235D/S239D/A330Y/I332E, S239D/V240I/A330Y/I332E, S239D/V264T/A330Y/I332E, S239D/K326E/A330Y/I32E, S234D/K326T/A330Y/I332E, E274R, P227G, G236S, D221K, H224E, K246H, D249Y, R255Y, E258H, E258Y, T260H, E283H, E283L, V284E, S239D/3272I/I332E, S239D/E272Y/A330L/I332E, S239D/E272I/A330L/I332E, S239D/K274E/I332E, S239D/K326T/I332E, S239D/K326E/I332E and S239D/K274E/A330L/I332E, according to EU numbering.

[0501] In some embodiments, one or more of these variants can be included either in both of the Fc monomeric domains or in only one of the Fc monomeric domains of a heterodimeric antibody. In some embodiments, an anti-NKp46 × anti-MICA/B bispecific antibody described includes ADCC-enhanced variants which includes one or more amino acid modifications in a first Fc domain and/or a second Fc domain, in other words, in the Fc domain of a first monomer, in the Fc domain of a second monomer, or in the Fc domains of both monomers. In some instances, a first Fc domain includes an Fc ADCC variant, and a second Fc domain does not include an Fc ADCC variant, resulting in an asymmetrical distribution of Fc ADCC variants. In other instances, a first Fc domain includes an Fc ADCC variant, and a second Fc domain includes an Fc ADCC variant. In one embodiment, the Fc ADCC variant of the first and second Fc domains can be the same amino acid substitution. Also, in one embodiment, the Fc ADCC variant of the first and second Fc domains can be different amino acid substitution.

[0502] In some embodiments, the Fc ADCC variants described bind with greater affinity to the FcγRIIIa (CD16A) human receptor. In some embodiments, the Fc variants have affinity for FcγRIIIa (CD16A) that is at least 1-fold, 5-fold, 10-fold, 100-fold, 200-fold, or 300-fold greater than that of the parental Fc domain.

[0503] In some embodiments, the Fc ADCC variants described can mediate effector function more effectively in the presence of effector cells. In some embodiments, the Fc variants mediate ADCC that is greater than that mediated by the parental Fc domain. In certain embodiments, the Fc variants mediate ADCC that is at least 5-fold, 10-fold, 20-fold, 30-fold, 40-fold, or 50-fold greater than that mediated by the parental Fc domain.

[0504] Additional detailed descriptions of Fc variants that may enhance ADCC are provided in WO2004/029207, which is expressly incorporated herein by reference in its entirety and

specifically for the variants disclosed therein.

1. Fc v90 Variants

[0505] In some embodiments, an Fc domain with enhanced binding to human FcγRIIIa (CD16A) and thus increased ADCC activity ("an Fc ADCC variant") utilizes the amino acid substitutions S239D/I332E (sometimes referred to as the "v90 variants") in the CH2 domain of one or both of the monomeric Fc domains, according to EU numbering. In some embodiments, a bispecific antibody described herein comprises the Fc v90 variants (e.g., amino acid substitutions S239D/I332E) in both Fc domains. In some embodiments, a bispecific antibody described herein comprises the Fc v90 variants in only one of the monomeric Fc domains. In some embodiments, the antibody comprises the Fc v90 variants in one of the monomeric Fc domains and lacks the Fc v90 variants in another Fc domain. In some embodiments, the antibody comprises the Fc v90 variants in an Fc domain and an amino acid substitution S239D in the CH2 domain of another Fc domain, according to EU numbering. In certain embodiments, the antibody comprises the Fc v90 variants in an Fc domain and an amino acid substitution I332E in the CH2 domain of another Fc domain, according to EU numbering. In some embodiments, the antibody comprises the Fc v90 variants in an Fc domain and lacks an amino acid substitution selected from S239D, I332E and S239D/I332E in the CH2 domain of another Fc domain, according to EU numbering. In some embodiments, one monomeric Fc domain comprises the S239D variant and the other comprises the I332E variant. In some embodiments, one monomeric Fc domain comprises the S239D variant and the other comprises no Fc ADCC variant. In some embodiments, one monomeric Fc domain comprises the I332E variant and the other comprises no Fc ADCC variant.

[0506] As will be appreciated by those in the art, in the case of these asymmetrical Fc ADCC variants, which monomer receives which variant(s) can be based on the "strandedness" outlined herein; that is, it may be useful to calculate the pI of different combinations and utilize the Fc ADCC variants such that the pIs of the two monomers are different to facilitate purification.

[0507] In some embodiments, monomer 1 comprises a first Fc v90 variants, and monomer 2 comprises the amino acid substitution S239D or I332E. In some embodiments, monomer 1 comprises the Fc V90 variants, and monomer 2 does not comprise the amino acid substitution(s) S239D, I332E or S239D/I332E. In some embodiments, at least one of the Fc domains of the bispecific antibody comprises the Fc v90 variants. A first Fc domain may comprise the Fc v90

variants, or it may comprise a parental sequence relative to the Fc v90 variants (e.g., a wild-type Fc domain, a Fc domain with one or more amino acid modifications that improves ADCC but does not include S239D, I332E or S239D/I332E substitutions, and the like). In such instances where at least one of the Fc domains comprises a parental sequence, relative to the Fc v90 variants, for the purposes of this section, this Fc domain may be referred to as a "WT Fc domain" with respect to the S239 and I332 positions of the Fc domain. In some embodiments, the antibody described herein comprises an Fc domain having an amino acid substitution of either S239D, I332E, or S239D/I332E, and another Fc domain having an amino acid substitution of either S239D, I332E, or S239D/I332E. In some embodiments, the antibody described herein comprises an Fc domain having an amino acid substitution of either S239D, I332E, or S239D/I332E, and another Fc domain without an amino acid substitution of either S239D, I332E, or S239D/I332E.

[0508] In some embodiments, the first Fc domain and the second Fc domain contain a set of ADCC-enhanced variant substitutions (first Fc domain variant : second Fc domain variant) selected from the group including: S239 : I332E; S239D : S239D; S239D : WT; S239D : S239D/I332E; S239D/I332E : WT; S239D/I332E : S239D; S239D/I332E : I332E; S239D/I332E : S239D/I332E; I332E : WT; I332E : I332E; I332E : S239D; I332E : S239D/I332E; WT : S239D; WT : I332E; WT : S239D/I332E, according to EU numbering. In some embodiments, monomer 1 and monomer 2 contain a set of ADCC-enhanced variant substitutions (monomer 1 : monomer 2) selected from the group including: S239 : I332E; S239D : S239D; S239D : WT; S239D : S239D/I332E; S239D/I332E : WT; S239D/I332E : S239D; S239D/I332E : I332E; S239D/I332E : S239D/I332E; I332E : WT; I332E : I332E; I332E : S239D; I332E : S239D/I332E; WT : S239D; WT : I332E; WT : S239D/I332E, according to EU numbering.

[0509] In some embodiments, Fc domains with enhanced ADCC can further comprise one or more additional modifications at one or more of the following positions, including, but not limited to, 236, 243, 298, 299, or 330 in the CH2 domain, according to EU numbering. In some embodiments, the Fc variant domains comprise an amino acid substitution including, but not limited to: 236A, 243L, 298A, 299T, or 330L in the CH2 domain, according to EU numbering.

[0510] In some embodiments, an ADCC-enhanced Fc variant further includes, but is not limited, an amino acid substitution at one or more positions of the CH2 domain, according to EU numbering selected from the group including: position 236, 243, 298, 299, and 330. In some

embodiments, an ADCC-enhanced Fc variant includes an amino acid substitution selected from the group including: 236A, 243L, 298A, 299T, 330L, 239D/332E, 236A/332E, 239D/332E/330L, 332E/330L, and any combination thereof in the CH2 domain, according to EU numbering. In some embodiments, the first Fc domain and/or the second Fc domain comprises an ADCC-enhanced Fc variant including, but not limited to, an amino acid substitution selected from the group including: 236A, 243L, 298A, 299T, 330L, 239D/332E, 236A/332E, 239D/332E/330L, 332E/330L, and any combination thereof in the CH2 domain, according to EU numbering, such that the Fc ADCC variant is the same in both Fc domain. Alternatively, the Fc ADCC variant is a different variant in each of the Fc domains.

[0511] Engineered antibodies comprising such ADCC-enhanced Fc variants can also have higher-affinity FcγRIIIa binding, thus resulting in stronger ADCC activity with NK cells. Bispecific antibodies having a variant Fc domain described herein can be useful and effective for NK cell-mediated killing of tumor cells.

2. Fc Variants to Increase Binding to FcγRIIIa/CD16A

[0512] There are additional Fc substitutions that find use in enhancing FcγRIIIa binding. In some embodiments, the Fc domains of the bispecific antibodies provided include one or more Fc domains having increased binding to FcγRIIIa as compared to human IgG1 produced in standard research and production cell lines. In some embodiments, the Fc variants with improved binding affinity to at least FcγRIIIa have amino acid substitution(s) selected from the group including: V264I/I332E, S298A, S298A/I332E, S298A/E333A/K334A, S239Q/I332E, D265G, Y296Q, S298T, L328I/I332E, V264T, V266I, S239D/I332N, S239E/I332N, S239E/I332Q, S239N/I332E, S239Q/I332D, K326E, A330Y/I332E, V264I/A330Y/I332E, A330L/I332E, V264I/A330L/I332E, L234D, L234E, L234I, L235D, L235T, A330F, L328V/I332E, S239Q/V264I/I332E, S239E/V264I/A330Y/I332E, K274R, N276Y, S324T, K334I, K334F, L234I/L235D, L235D/S239D/A330Y/I332E, S239D/V240I/A330Y/I332E, S239D/V264T/A330Y/I332E, S239D/K326E/A330Y/I332E, S239D/K326T/A330Y/I332E, E298R, S324G, E272R, P227G, G236S, D221K, H224E, K246H, D249Y, R255Y, E258H, T260H, G281D, E283H, E283L, V284E, S239D/3272I/I332E, S239D/E272Y/A330L/I332E, S239D/E272I/A330L/I332E, S239D/K274E/I332E, S239D/K326T/I332E, S239D/K326E/I332E and S239D/K274E/A330L/I332E, according to EU numbering of the Fc domain. Additional Fc

variants with enhanced binding affinity, specificity and/or avidity to FcγRIIIa are disclosed the specification and Figure 41 of U.S. Pat. No. 8,188,231.

[0513] The described bispecific antibodies contain such Fc variants that provide enhanced effector function and substantial increases in affinity for FcγRIIIa. In some embodiments, the Fc variants improve binding to FcγRIIIa allotypes such as, for example, both V158 and F158 polymorphic forms of FcγRIIIa. The FcγR binding affinities of these Fc variants can be evaluated using assay recognized by those skilled in the art including, but not limited to, a Surface Plasmon Resonance (SPR) and/or a BLI binding assay (such as Biacore, Octet, or Carterra LSA).

C. Fc Variants for Increasing Binding to FcRn

[0514] Provided herein are additional Fc substitutions that find use in increased binding to the FcRn receptor and increased serum half-life, as specifically disclosed in U.S. Ser. No. 12/341,769, hereby incorporated by reference in its entirety, including, but not limited to, N434S, N434A, M428L, V308F, V259I, M428L/N434S, M428L/N434A, V259I/V308F, Y436I/M428L, Y436I/N434S, Y436V/N434S, Y436V/M428L, M252Y/S254T/T256E, and V259I/V308F/M428L. Such modification may be included in one or both Fc domains of the subject antibody.

[0515] In some embodiments, additional Fc variants can increase serum half-life of a bispecific antibody compared to a parental Fc domain. In some embodiments, the Fc variants have one or more amino acid modifications (i.e., substitutions, insertions or deletions) at one or more of the following amino acid residues or positions selected from the group including: 234, 235, 238, 250, 252, 254, 256, 265, 272, 286, 303, 305, 307, 311, 312, 317, 322, 340, 356, 360, 362, 376, 378, 380, 382, 413, 424, 428, and 434, according to EU numbering of the Fc region.

[0516] In some embodiments, the Fc variants have one or more amino acid substitutions selected from the group including: 234F, 235Q, 250E, 250Q, 252T, 252Y, 254T, 256E, 428L, 428F, 434S, 434A, 428L/434S, 428L/434A, 252Y/254T/256E, 234F/235Q/252T/254T/256E/322Q, 250E/428F, 250E/428L, 250Q/428F, and 250Q/428L, according to EU numbering.

[0517] In some embodiments, antibodies described can include M428L/N434S or M428L/N434A substitutions in one or both Fc domains, which can result in longer half-life in

serum. In more embodiments, a first Fc domain or a second Fc domain include M428L/N434S substitutions. In more embodiments, a first Fc domain and a second Fc domain include M428L/N434S substitutions. In certain embodiments, a first Fc domain or a second Fc domain include M428L/N434A substitutions. In certain embodiments, a first Fc domain and a second Fc domain include M428L/N434Asubstitutions. Such substitutions can result in longer half-life in serum of molecules comprising such.

D. Fc Variants for Heterodimeric Antibodies

[0518] In some embodiments, the bispecific antibodies provided herein are heterodimeric bispecific antibodies that include two variant Fc domain sequences. Such variant Fc domains include amino acid modifications to facilitate the self-assembly and/or purification of the heterodimeric antibodies.

[0519] An ongoing problem in antibody technologies is the desire for "bispecific" antibodies that bind to two different antigens simultaneously, in general thus allowing the different antigens to be brought into proximity and resulting in new functionalities and new therapies. In general, these antibodies are made by including genes for each heavy and light chain into the host cells. This generally results in the formation of the desired heterodimer (A-B), as well as the two homodimers (A-A and B-B (not including the light chain heterodimeric issues)). However, a major obstacle in the formation of bispecific antibodies is the difficulty in biasing the formation of the desired heterodimeric antibody over the formation of the homodimers and/or purifying the heterodimeric antibody away from the homodimers.

[0520] There are a number of mechanisms that can be used to generate the subject heterodimeric antibodies. In addition, as will be appreciated by those in the art, these different mechanisms can be combined to ensure high heterodimerization. Amino acid modifications that facilitate the production and purification of heterodimers are collectively referred to generally as "heterodimerization variants." As discussed below, heterodimerization variants include "skew" variants (e.g., the "knobs and holes" and the "charge pairs" variants described below) as well as "pI variants," which allow purification of heterodimers from homodimers. As is generally described in U.S. Pat. No. 9,605,084, hereby incorporated by reference in its entirety and specifically as below for the discussion of heterodimerization variants, useful mechanisms for

heterodimerization include "knobs and holes" ("KIH") as described in U.S. Pat. No. 9,605,084, "electrostatic steering" or "charge pairs" as described in U.S. Pat. No. 9,605,084, pI variants as described in U.S. Pat. No. 9,605,084, and general additional Fc variants as outlined in U.S. Pat. No. 9,605,084 and below.

[0521] Heterodimerization variants that are useful for the formation and purification of the subject heterodimeric antibodies away from homodimers are further discussed in detailed below.

[0522] There are a number of suitable pairs of sets of heterodimerization skew variants. These variants come in "pairs" of "sets." That is, one set of the pair is incorporated into the first monomer and the other set of the pair is incorporated into the second monomer. It should be noted that these sets do not necessarily behave as "knobs in holes" variants, with a one-to-one correspondence between a residue on one monomer and a residue on the other; that is, these pairs of sets form an interface between the two monomers that encourages heterodimer formation and discourages homodimer formation, allowing the percentage of heterodimers that spontaneously form under biological conditions to be over 90%, rather than the expected 50% (25 homodimer A/A:50% heterodimer A/B:25% homodimer B/B).

1. Skew Variants

[0523] In some embodiments, the heterodimeric antibody includes skew (e.g., steric) variants which are one or more amino acid modifications in a first Fc domain (A) and/or a second Fc domain (B) that favor the formation of Fc heterodimers (Fc dimers that include the first and the second Fc domain; (A-B) over Fc homodimers (Fc dimers that include two of the first Fc domain or two of the second Fc domain; A-A or B-B). Suitable skew variants are included in the Fig. 29 of U.S. Publ. App. No. 2016/0355608, hereby incorporated by reference in its entirety and specifically for its disclosure of skew variants, as well as in Figs. 4, 10, and 11 described herein.

[0524] Thus, suitable Fc heterodimerization variant pairs that will permit the formation of heterodimeric Fc regions are shown in the figures including Figs. 4, 10, and 11. Thus, a first Fc domain has first Fc heterodimerization variants and the second Fc domain has second Fc heterodimerization variants selected from the pairs in Figs. 4, 10, and 11.

[0525] One mechanism is generally referred to in the art as "knobs and holes," referring to amino acid engineering that creates steric influences to favor heterodimeric formation and

disfavor homodimeric formation can also optionally be used; this is sometimes referred to as "knobs and holes," as described in U.S. Ser. No. 61/596,846, Ridgway et al., Protein Engineering 9(7):617 (1996); Atwell et al., J. Mol. Biol., 270:26 (1997); U.S. Pat. No. 8,216,805, all of which are hereby incorporated by reference in their entirety. The Figures identify a number of "monomer A-monomer B" pairs that rely on "knobs and holes". In addition, as described in Merchant et al., Nature Biotech., 16:677 (1998), these "knobs and hole" mutations can be combined with disulfide bonds to skew formation to heterodimerization.

[0526] An additional mechanism that finds use in the generation of heterodimers is sometimes referred to as "electrostatic steering" as described in Gunasekaran et al., J. Biol. Chem., 285(25):19637 (2010), hereby incorporated by reference in its entirety. This is sometimes referred to herein as "charge pairs". In this embodiment, electrostatics are used to skew the formation towards heterodimerization. As those in the art will appreciate, these variants may also have an effect on pI, and thus on purification, and thus could in some cases also be considered pI variants. However, as these were generated to force heterodimerization and were not used as purification tools, they are classified as "steric variants". These include, but are not limited to, D221E/P228E/L368E paired with D221R/P228R/K409R (e.g., these are "monomer corresponding sets") and C220E/P228E/368E paired with C220R/E224R/P228R/K409R.

[0527] In some embodiments, the skew variants advantageously and simultaneously favor heterodimerization based on both the "knobs and holes" mechanism as well as the "electrostatic steering" mechanism. In some embodiments, the heterodimeric antibody includes one or more sets of such heterodimerization skew variants. These variants come in "pairs" of "sets." That is, one set of the pair is incorporated into the first monomer and the other set of the pair is incorporated into the second monomer. It should be noted that these sets do not necessarily behave as "knobs in holes" variants, with a one-to-one correspondence between a residue on one monomer and a residue on the other. That is, these pairs of sets may instead form an interface between the two monomers that encourages heterodimer formation and discourages homodimer formation, allowing the percentage of heterodimers that spontaneously form under biological conditions to be over 90%, rather than the expected 50% (25% homodimer A/A:50% heterodimer A/B:25% homodimer B/B). Exemplary heterodimerization skew variants are depicted in Fig. 11. Such skew variants include, but are not limited to:

S364K/E357Q:L368D/K370S; L368D/K370S:S364K; L368E/K370S:S364K; T411E/K360E/Q362E:D401K; L368D/K370S:S364K/E357L; K370S:S364K/E357Q (EU numbering). In terms of nomenclature, the pair "S364K/E357Q:L368D/K370S" means that one of the monomers has the double variant set S364K/E357Q and the other has the double variant set L368D/K370S.

[0528] In exemplary embodiments, the heterodimeric antibody includes Fc heterodimerization variants as sets: S364K/E357Q:L368D/K370S; L368D/K370S:S364K; L368E/K370S:S364K; T411E/K360E/Q362E:D401K; L368D/K370S:S364K/E357L; K370S:S364K/E357Q; or a T366S/L368A/Y407V:T366W (optionally including a bridging disulfide, T366S/L368A/Y407V/Y349C:T366W/S354C or T366S/L368A/Y407V/S354C:T366W/Y349C) are all skew variant amino acid substitution sets of Fc heterodimerization variants. In an exemplary embodiment, the heterodimeric antibody includes a "S364K/E357Q:L368D/K370S" amino acid substitution set. In terms of nomenclature, the pair "S364K/E357Q:L368D/K370S" means that one of the monomers includes an Fc domain that includes the amino acid substitutions S364K and E357Q and the other monomer includes an Fc domain that includes the amino acid substitutions L368D and K370S; as above, the "strandedness" of these pairs depends on the starting pI.

[0529] In some embodiments, the skew variants provided herein can be optionally and independently incorporated with any other modifications, including, but not limited to, other skew variants (see, e.g., in Fig. 37 of US Publ. App. No. 2012/0149876, herein incorporated by reference, particularly for its disclosure of skew variants), pI variants, isotypic variants, FcRn variants, ablation variants, etc. into one or both of the first and second Fc domains of the heterodimeric antibody. Further, individual modifications can also independently and optionally be included or excluded from the subject the heterodimeric antibody.

[0530] Additional monomer A and monomer B variants that can be combined with other variants, optionally and independently in any amount, such as pI variants outlined herein or other steric variants that are shown in Fig. 37 of US 2012/0149876, the figure and legend and SEQ ID NOs of which are incorporated expressly by reference herein.

[0531] In some embodiments, the steric variants outlined herein can be optionally and independently incorporated with any pI variant (or other variants such as, for example, Fc ADCC

variants, FcRn variants, etc.) into one or both monomers, and can be independently and optionally included or excluded from the proteins of the antibodies described herein.

[0532] A subset of skew variants is "knobs in holes" (KIH) variants. Exemplary "knob-in-hole" variants are depicted in Fig. 7 of U.S. Pat. No. 8,216,805, which is incorporated herein by reference. Such "knob-in-hole" variants include, but are not limited to: an amino acid substitution at position 347, 349, 350, 351, 357, 366, 368, 370, 392, 394, 395, 397, 398, 399, 405, 407 and/or 409 of the CH3 constant domain of an IgG such as an IgG1, IgG2a, IgG2b, or IgG4 (Kabat numbering). In some embodiments, the "knob-in-hole " variants include, but are not limited to: an amino acid substitution at Y349, L351, E357, T366, L368, K370, N390, K392, T394, D399, S400, F405, Y407, K409, R409, T411, or any combination thereof of the CH3 domain of an IgG such as an IgG1, IgG2a, IgG2b, IgG4 (EU numbering). In some embodiments, the "knob-in-hole" variants include, but are not limited to: one or more amino acid substitutions including Y349D/E, L351D/K/Y, E357K, T366A/K/Y, L368E, K370E, N390D/K/R, K392E/F/L/M/R, T394W, D399K/R/W/Y, S400D/E/K/R, F405A/I/M/S/T/V/W, Y407A/Y, K409E/D/F, R409E/D/F, and T411D/E/K/N/Q/R/W.

[0533] In some embodiments, such variants include one or more amino acid substitutions including, but not limited to: Y349C, E357K, S354C, T366S, T366W, T366Y, L368A, K370E, T394S T394W, D399K, F405A, F405W, Y407A, Y407T, Y407V, R409D, T366Y/F405A, T394W/Y407T, T366W/F405W, T394S/Y407A, F405W/Y407A, and T366W/T394S (EU numbering). In some embodiments, these variants include knob:hole paired substitutions including, but not limited to: T366W:Y407V; S354C/T366W:Y349C/T366S/Y407V; Y349C/T366W:S354C/T366S/L368A/Y407V; Y349C/T366W/R409D/K370E:S354C/T366S/L368A/Y407V/D399K/E357K; R409D/K370E:D399K/E357K; T366W:T366S/L368A/Y407V; T366W/R409D/K370E:T366S/L368A/Y407V/D399K/E357K; T366W:T366S/L368A/Y407V; T366W/Y366Y:T366S/L368A/T394W/F405A/Y407V; Y349C/T366W:S354C/T366S/L368A/Y407V; Y349C/T366W/R409D/K370E:S354C/T366S/L368A/Y407V/D399K/E357K paired substitutions, according to EU numbering.

[0534] Additional exemplary "knob-in-hole" variants as described by the amino acid

substitutions of the CH3 domains can be found in, for example, Carter et al., J. Immunol. Methods, 248(1-2):7-15 (2001), Merchant et al. Nat. Biotechnol. 16(7):677-81 (1998), Ridgway et al. Protein Eng. 9(7):617-2 (1996), and U.S. Patent Nos. 8,216,805 and 10,287,352, the disclosures of which are herein incorporated by reference in their entireties.

2. pI (Isoelectric Point) Variants for Heterodimers

[0535] In some embodiments, the heterodimeric antibody includes purification variants that advantageously allow for the separation of heterodimeric antibody (e.g., anti-NKp46 × anti-MICA/B bispecific antibody) from homodimeric proteins.

[0536] There are several basic mechanisms that can lead to ease of purifying heterodimeric antibodies. For example, modifications to one or both of the antibody heavy chain monomers A and B such that each monomer has a different pI allows for the isoelectric purification of heterodimeric A-B antibody from monomeric A-A and B-B proteins. Alternatively, some scaffold formats, such as the "1 + 1 Fab-scFv-Fc" format and the "2 + 1 Fab_2-scFv-Fc" format, also allows separation on the basis of size. As described above, it is also possible to "skew" the formation of heterodimers over homodimers using skew variants. Thus, a combination of heterodimerization skew variants and pI variants find particular use in the heterodimeric antibodies provided herein.

[0537] Additionally, as more fully outlined below, depending on the format of the heterodimeric antibody, pI variants either contained within the constant region and/or Fc domains of a monomer, and/or domain linkers can be used. In some embodiments, the heterodimeric antibody includes additional modifications for alternative functionalities that can also create pI changes, such as Fc, FcRn and KO variants.

[0538] In some embodiments, the subject heterodimeric antibodies provided herein include at least one monomer with one or more modifications that alter the pI of the monomer (i.e., a "pI variant"). In general, as will be appreciated by those in the art, there are two general categories of pI variants: those that increase the pI of the protein (basic changes) and those that decrease the pI of the protein (acidic changes). As described herein, all combinations of these variants can be done: one monomer may be wild type, or a variant that does not display a significantly different pI from wild-type, and the other can be either more basic or more acidic. Alternatively, each monomer is changed, one to more basic and one to more acidic.

[0539] Depending on the format of the heterodimer antibody, pI variants can be either contained within the constant and/or Fc domains of a monomer, or charged linkers, either domain linkers or scFv linkers, can be used. That is, antibody formats that utilize scFv(s) such as "1 + 1 Fab-scFv-Fc," format can include charged scFv linkers (either positive or negative), that give a further pI boost for purification purposes. As will be appreciated by those in the art, some 1 + 1 Fab-scFv-Fc formats are useful with just charged scFv linkers and no additional pI adjustments, although the antibodies described herein do provide pI variants that are on one or both of the monomers, and/or charged domain linkers as well. In addition, additional amino acid engineering for alternative functionalities may also confer pI changes, such as Fc, FcRn and KO variants.

[0540] In subject heterodimeric antibodies for which pI is used as a separation mechanism to allow the purification of heterodimeric proteins, amino acid variants are introduced into one or both of the monomer polypeptides. That is, the pI of one of the monomers (referred to herein for simplicity as "monomer A") can be engineered away from monomer B, or both monomer A and B can be changed, with the pI of monomer A increasing and the pI of monomer B decreasing. As is outlined more fully below, the pI changes of either or both monomers can be done by removing or adding a charged residue (e.g., a neutral amino acid is replaced by a positively or negatively charged amino acid residue, e.g., glycine to glutamic acid), changing a charged residue from positive or negative to the opposite charge (e.g., aspartic acid to lysine) or changing a charged residue to a neutral residue (e.g., loss of a charge; lysine to serine). A number of these variants are shown in the Figs. 4, 5, and 10.

[0541] Thus, in some embodiments, the subject heterodimeric antibody includes amino acid modifications in the constant regions that alter the isoelectric point (pI) of at least one, if not both, of the monomers of a dimeric protein to form "pI antibodies") by incorporating amino acid substitutions ("pI variants" or "pI substitutions") into one or both of the monomers. As shown herein, the separation of the heterodimers from the two homodimers can be accomplished if the pIs of the two monomers differ by as little as 0.1 pH unit, with 0.2, 0.3, 0.4 and 0.5 or greater all finding use in the antibodies described herein.

[0542] As will be appreciated by those in the art, the number of pI variants to be included on each or both monomer(s) to achieve good separation will depend in part on the starting pI of the components, for example in the 1 + 1 Fab-scFv-Fc and 2 + 1 Fab_2-scFv-Fc formats, the starting

pI of the scFv and Fab(s) of interest. That is, to determine which monomer to engineer or in which "direction" (e.g., more positive, or more negative), the Fv sequences of the two target antigens are calculated and a decision is made from there. As is known in the art, different Fvs will have different starting pIs which are exploited in the antibodies described herein. In general, as outlined herein, the pIs are engineered to result in a total pI difference of each monomer of at least about 0.1 logs, with 0.2 to 0.5 being preferred as outlined herein.

[0543] In the case where pI variants are used to achieve heterodimerization, by using the constant region(s) of the heavy chain(s), a more modular approach to designing and purifying bispecific proteins, including antibodies, is provided. Thus, in some embodiments, heterodimerization variants (including skew and pI heterodimerization variants) are not included in the variable regions, such that each individual antibody must be engineered. In addition, in some embodiments, the possibility of immunogenicity resulting from the pI variants is significantly reduced by importing pI variants from different IgG isotypes such that pI is changed without introducing significant immunogenicity. Thus, an additional problem to be solved is the elucidation of low pI constant domains with high human sequence content, e.g., the minimization or avoidance of non-human residues at any particular position. Alternatively, or in addition to isotypic substitutions, the possibility of immunogenicity resulting from the pI variants is significantly reduced by utilizing isosteric substitutions (e.g., Asn to Asp; and Gln to Glu).

[0544] As discussed below, a side benefit that can occur with this pI engineering is also the extension of serum half-life and increased FcRn binding. That is, as described in US Publ. App. No. US 2012/0028304 (incorporated by reference in its entirety), lowering the pI of antibody constant domains (including those found in antibodies and Fc fusions) can lead to longer serum retention in vivo. These pI variants for increased serum half-life also facilitate pI changes for purification.

[0545] In addition, it should be noted that the pI variants give an additional benefit for the analytics and quality control process of bispecific antibodies, as the ability to either eliminate, minimize and distinguish when homodimers are present is significant. Similarly, the ability to reliably test the reproducibility of the heterodimeric antibody production is important.

[0546] In general, embodiments of particular use rely on sets of variants that include skew variants, which encourage heterodimerization formation over homodimerization formation,

coupled with pI variants, which increase the pI difference between the two monomers to facilitate purification of heterodimers away from homodimers.

[0547] Exemplary combinations of pI variants are shown in Figs. 4 and 5, and Fig. 30 of U.S. Publ. App. No. 2016/0355608, all of which are herein incorporated by reference in its entirety and specifically for the disclosure of pI variants. Preferred combinations of pI variants are shown in Figs. 4, 5, and 10. As outlined herein and shown in the figures, these changes are shown relative to IgG1, but all isotypes can be altered this way, as well as isotype hybrids. In the case where the heavy chain constant domain is from IgG2-4, R133E and R133Q can also be used.

[0548] In one embodiment, a preferred combination of pI variants has one monomer (the negative Fab side) comprising 208D/295E/384D/418E/421D variants (N208D/Q295E/N384D/Q418E/N421D when relative to human IgG1) and a second monomer (the positive scFv side) comprising a positively charged scFv linker, including $(GKPGS)_4$ (SEQ ID NO: XXX). However, as will be appreciated by those in the art, the first monomer includes a CH1 domain, including position 208. Accordingly, in constructs that do not include a CH1 domain (for example for fusion proteins that do not utilize a CH1 domain on one of the domains), a preferred negative pI variant Fc set includes 295E/384D/418E/421D variants (Q295E/N384D/Q418E/N421D when relative to human IgG1).

[0549] Accordingly, in some embodiments, one monomer has a set of substitutions from Fig. 4 and the other monomer has a charged linker (either in the form of a charged scFv linker because that monomer comprises an scFv or a charged domain linker, as the format dictates, which can be selected from those depicted in Figs. 8 and 9.

[0550] In some embodiments, modifications are made in the hinge of the Fc domain, including positions 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, and 230 based on EU numbering. Thus, pI mutations and particularly substitutions can be made in one or more of positions 216-230, with 1, 2, 3, 4 or 5 mutations finding use. Again, all possible combinations are contemplated, alone or with other pI variants in other domains.

[0551] Specific substitutions that find use in lowering the pI of hinge domains include, but are not limited to, a deletion at position 221, a non-native valine or threonine at position 222, a deletion at position 223, a non-native glutamic acid at position 224, a deletion at position 225, a deletion at position 235 and a deletion or a non-native alanine at position 236. In some cases,

only pI substitutions are done in the hinge domain, and in others, these substitution(s) are added to other pI variants in other domains in any combination.

[0552] In some embodiments, mutations can be made in the CH2 region, including positions 233, 234, 235, 236, 274, 296, 300, 309, 320, 322, 326, 327, 334 and 339, based on EU numbering. It should be noted that changes in 233-236 can be made to increase effector function (along with 327A) in the IgG2 backbone. Again, all possible combinations of these 14 positions can be made; e.g., may include a variant Fc domain with 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10 CH2 pI substitutions.

[0553] Specific substitutions that find use in lowering the pI of CH2 domains include, but are not limited to, a non-native glutamine or glutamic acid at position 274, a non-native phenylalanine at position 296, a non-native phenylalanine at position 300, a non-native valine at position 309, a non-native glutamic acid at position 320, a non-native glutamic acid at position 322, a non-native glutamic acid at position 326, a non-native glycine at position 327, a non-native glutamic acid at position 334, a non-native threonine at position 339, and all possible combinations within CH2 and with other domains.

[0554] In this embodiment, the modifications can be independently and optionally selected from position 355, 359, 362, 384, 389, 392, 397, 418, 419, 444 and 447 (EU numbering) of the CH3 region. Specific substitutions that find use in lowering the pI of CH3 domains include, but are not limited to, a non-native glutamine or glutamic acid at position 355, a non-native serine at position 384, a non-native asparagine or glutamic acid at position 392, a non-native methionine at position 397, a non-native glutamic acid at position 419, a non-native glutamic acid at position 359, a non-native glutamic acid at position 362, a non-native glutamic acid at position 389, a non-native glutamic acid at position 418, a non-native glutamic acid at position 444, and a deletion or non-native aspartic acid at position 447.

[0555] In general, as will be appreciated by those in the art, there are two general categories of pI variants: those that increase the pI of the protein (basic changes) and those that decrease the pI of the protein (acidic changes). As described herein, all combinations of these variants can be done: one monomer may be wild type, or a variant that does not display a significantly different pI from wild-type, and the other can be either more basic or more acidic. Alternatively, each monomer is changed, one to more basic and one to more acidic.

[0556] Preferred combinations of pI variants are shown in Fig. 5. As outlined herein and shown in the figures, these changes are shown relative to IgG1, but all isotypes can be altered this way, as well as isotype hybrids. In the case where the heavy chain constant domain is from IgG2 or IgG4, R133E and R133Q can also be used.

[0557] In one embodiment, for example in the Figs. 25A-25E formats, a preferred combination of pI variants has one monomer (the negative Fab side) comprising 208D/295E/384D/418E/421D variants (N208D/Q295E/N384D/Q418E/N421D when relative to human IgG1) and a second monomer (the positive scFv side) comprising a positively charged scFv linker, including $(GKPGS)_4$ (SEQ ID NO: XXX). However, as will be appreciated by those in the art, the first monomer includes a CH1 domain, including position 208. Accordingly, in constructs that do not include a CH1 domain (for example for antibodies that do not utilize a CH1 domain on one of the domains, for example in a dual scFv format or a "one-armed" format such as those depicted in Figs. 25A-25C), a preferred negative pI variant Fc set includes 295E/384D/418E/421D variants (Q295E/N384D/Q418E/N421D when relative to human IgG1).

[0558] Accordingly, in some embodiments, one monomer has a set of substitutions from Fig. 4F and/or Fig. 5 and the other monomer has a charged linker (either in the form of a charged scFv linker because that monomer comprises an scFv or a charged domain linker, as the format dictates, which can be selected from those depicted in Figs. 8 and 9.

3. Isotypic Variants:

[0559] In addition, many embodiments of the antibodies described herein rely on the "importation" of pI amino acids at particular positions from one IgG isotype into another, thus reducing or eliminating the possibility of unwanted immunogenicity being introduced into the variants. A number of these are shown in Fig. 21 of U.S. Publ. App. No. 2014/0370013, hereby incorporated by reference. That is, IgG1 is a common isotype for therapeutic antibodies for a variety of reasons, including high effector function. However, the heavy constant region of IgG1 has a higher pI than that of IgG2 (8.10 versus 7.31). By introducing IgG2 residues at particular positions into the IgG1 backbone, the pI of the resulting monomer is lowered (or increased) and additionally exhibits longer serum half-life. For example, IgG1 has a glycine (pI 5.97) at position 137, and IgG2 has a glutamic acid (pI 3.22); importing the glutamic acid will affect the pI of the resulting protein. As is described below, a number of amino acid substitutions are generally

required to significant affect the pI of the variant antibody. However, it should be noted as discussed below that even changes in IgG2 molecules allow for increased serum half-life.

[0560] In other embodiments, non-isotypic amino acid changes are made, either to reduce the overall charge state of the resulting protein (e.g., by changing a higher pI amino acid to a lower pI amino acid), or to allow accommodations in structure for stability, etc. as is further described below.

[0561] In addition, by pI engineering both the heavy and light constant domains, significant changes in each monomer of the heterodimer can be seen. As discussed herein, having the pIs of the two monomers differ by at least 0.5 can allow separation by ion exchange chromatography or isoelectric focusing, or other methods sensitive to isoelectric point.

4. Calculating pI:

[0562] The pI of each monomer can depend on the pI of the variant heavy chain constant domain and the pI of the total monomer, including the variant heavy chain constant domain and the fusion partner. Thus, in some embodiments, the change in pI is calculated on the basis of the variant heavy chain constant domain, using the chart in the Fig. 19 of U.S. Publ. App. No. 2014/0370013. As discussed herein, which monomer to engineer is generally decided by the inherent pI of the Fv and scaffold regions. Alternatively, the pI of each monomer can be compared.

5. pI Variants that also Confer Better FcRn In Vivo Binding

[0563] In the case where the pI variant decreases the pI of the monomer, they can have the added benefit of improving serum retention in vivo.

[0564] Although still under examination, Fc regions are believed to have longer half-lives in vivo, because binding to FcRn at pH 6 in an endosome sequesters the Fc (Ghetie and Ward, 1997, Immunol Today, 18(12): 592-598, entirely incorporated by reference). The endosomal compartment then recycles the Fc to the cell surface. Once the compartment opens to the extracellular space, the higher pH 7.4, induces the release of Fc back into the blood. In mice, Dall'Acqua et al. showed that Fc mutants with increased FcRn binding at pH 6 and pH 7.4 actually had reduced serum concentrations and the same half-life as wild-type Fc (Dall'Acqua et al., 2002, J. Immunol. 169:5171-5180, entirely incorporated by reference). The increased affinity

of Fc for FcRn at pH 7.4 is thought to forbid the release of the Fc back into the blood. Therefore, the Fc mutations that will increase Fc's half-life in vivo will ideally increase FcRn binding at the lower pH while still allowing release of Fc at higher pH. The amino acid histidine changes its charge state in the pH range of 6.0 to 7.4. Therefore, it is not surprising to find His residues at important positions in the Fc/FcRn complex.

[0565] Recently it has been suggested that antibodies with variable regions that have lower isoelectric points may also have longer serum half-lives (Igawa et al., 2010, PEDS, 23(5): 385-392, entirely incorporated by reference). However, the mechanism of this is still poorly understood. Moreover, variable regions differ from antibody to antibody. Constant region variants with reduced pI and extended half-life would provide a more modular approach to improving the pharmacokinetic properties of antibodies, as described herein.

6. Additional Fc Variants for Additional Functionality

[0566] In addition to the heterodimerization variants discussed above, there are a number of useful Fc amino acid modification that can be made for a variety of reasons, including, but not limited to, altering binding to one or more FcγR receptors, altered binding to FcRn receptors, etc., as discussed herein.

[0567] Accordingly, the antibodies provided herein (heterodimeric, as well as homodimeric) can include such amino acid modifications with or without the heterodimerization variants outlined herein (e.g., the pI variants and steric variants). Each set of variants can be independently and optionally included or excluded from any particular heterodimeric protein.

7. Additional Heterodimerization Variants

[0568] In some embodiments, the first Fc domain comprises one or more amino acid substitutions selected from the group including: L351Y, D399R, D399K, S400D, S400E, S400R, S400K, F405A, F405I, F405M, F405T, F405S, F405V, F405W, Y407A, Y407I, Y407L, Y407V, and any combination thereof, and the second Fc domain comprises one or more amino acid substitutions selected from the group including: T350V, T366A, T366I, T366L, T366M, T366Y, T366S, T366C, T366V, T366W, N390D, N390E, N390R, K392L, K392M, K392I, K392D, K392E, T394W, K409F, K409W, T411N, T411R, T411Q, T411K, T411D, T411E, T411W, and any combination thereof.

[0569] In some embodiments, other heterodimerization pair variants include, but are not limited to, amino acid substitutions of L234A/L235A: wildtype; L234A/L235A : L234K/L235K; L234D/L235E : L234K/L235K; E233A/L234D/L235E : E233A/L234R/L235R; L234D/L235E : E233K/L234R/L235R; E233A/L234K/L235A : E233K/L234A/L235K; E269Q/D270N: E269K/D270R; and WT : L235K/A327K of the CH2 domain, according to the EU numbering.

[0570] In some embodiments, the first and/or second Fc domains comprise one or more amino acid substitutions selected from the group including: S239D, D265S, S267D, E269K, S298A, K326E, A330L and I332E. In certain instances, the Fc paired variants include, but are not limited to, S239D/D265S/I332E/E269K : S239D/D265S/S298A; S239D/K326E/A330L/I332E : S298A or S239D/K326E/A330L/I332E/E269K : S298A of the CH2 domain, according to EU numbering.

[0571] Additional descriptions of useful heterodimeric variants are disclosed in U.S. Patent Nos. 9,732,155; 10,457,742 and 10,875,931 and U.S. Publ. App. Nos. 2021/0277150 and 2020/0087414, the disclosures of which, including the description of Fc domain variants are herein incorporated by reference in their entireties.

E. Ablation Variants

[0572] While in general NK engager multispecific antibodies retain at binding to CD16A (including "wild type" binding or increased binding to CD16A as outlined above), in some cases, surprisingly, NK engager activity can be seen even when binding to CD16A has been reduced or ablated. Accordingly, provided is another category of functional Fc variants to include are "FcγR ablation variants" or "Fc knock out (FcKO or KO)" variants. In these embodiments, it is desirable to reduce or remove the normal binding of the Fc domain to one or more or all of the Fcγ receptors (e.g., FcγR1, FcγRIIa, FcγRIIb, FcγRIIIa, etc.) to avoid additional mechanisms of action. That is, for example, in many embodiments, particularly in the use of bispecific antibodies that bind a target antigen monovalently it is generally desirable to ablate FcγRIIIa binding to eliminate or significantly reduce ADCC activity. Wherein one of the Fc domains comprises one or more Fcγ receptor ablation variants. These ablation variants are depicted in Fig. 6, and each can be independently and optionally included or excluded, with preferred aspects utilizing ablation variants selected from the group including G236R/L328R, E233P/L234V/L235A/G236del/S239K, E233P/L234V/L235A/G236del/S267K,

E233P/L234V/L235A/G236del/S239K/A327G, E233P/L234V/L235A/G236del/S267K/A327G and E233P/L234V/L235A/G236del. It should be noted that the ablation variants referenced herein ablate FcγR binding but generally not FcRn binding.

[0573] As is known in the art, the Fc domain of human IgG1 has the highest binding to the Fcγ receptors, and thus ablation variants can be used when the constant domain (or Fc domain) in the backbone of the heterodimeric antibody is IgG1. Alternatively, or in addition to ablation variants in an IgG1 background, mutations at the glycosylation position 297 (generally to A or S) can significantly ablate binding to FcγRIIIa, for example. Human IgG2 and IgG4 have naturally reduced binding to the Fcγ receptors, and thus those backbones can be used with or without the ablation variants.

F. Combination of Heterodimeric and Fc Variants

[0574] As will be appreciated by those in the art, all of the recited heterodimerization variants (including skew and/or pI variants) can be optionally and independently combined in any way, as long as they retain their "strandedness" or "monomer partition." In addition, all of these variants can be combined into any of the heterodimerization formats.

[0575] In the case of pI variants, while embodiments finding particular use are shown in the Figures, other combinations can be generated, following the basic rule of altering the pI difference between two monomers to facilitate purification.

[0576] In addition, any of the heterodimerization variants, skew, and pI, are also independently and optionally combined with Fc ADCC variants, Fc variants, FcRn variants, or Fc ablation variants, as generally outlined herein.

[0577] Exemplary combination of variants that are included in some embodiments of the heterodimeric 1 + 1 Fab × scFv, 1 + 1 empty × Fab-scFv, 2 + 1 Fab × Fab-scFv, 2 + 1 Fab2 × scFv, and 2 + 1 mAb-scFv format antibodies are included in Fig. 4 and Figs. 10-16. In certain embodiments, the antibody is a heterodimeric 1 + 1 Fab × scFv, 1 + 1 empty × Fab-scFv, 2 + 1 Fab × Fab-scFv, 2 + 1 Fab2 × scFv, and 2 + 1 mAb-scFv formats format antibody as shown in Figs. 25A-25E.

[0578] Accordingly, the antibodies provided herein (heterodimeric, as well as homodimeric) can

include such amino acid modifications with or without the heterodimerization variants outlined herein (e.g., the pI variants and steric variants). Each set of variants can be independently and optionally included or excluded from any particular heterodimeric protein.

G. Afucosylated Fc Domains

[0579] In some embodiments, the increased binding of a Fc domain to CD16A is the result of producing the NKE in a cell line that reduces or eliminates the incorporation of fucose into the glycosylation of the NKE. See, for example, Pereira et al., MAbs (2018) 10(5):693-711.

[0580] In some embodiments, antibodies comprising Fc domains described are produced in a host cell such that the Fc domains have reduced fucosylation or no fucosylation compared to a parental Fc domain. In some instances, antibodies described are produced in a genetically modified host cell, wherein the genetic modification to the host cell results in the overexpression of β(1,4)-N-acetylglucosaminyltransferase III (GnTIII), a glycosyltransferase catalyzing the formation of bisected oligosaccharides, which are generally also non-fucosylated. N-glycosylation of the Fc domain can play a role in binding to FcγR; and afucosylation of the N-glycan can increase the binding capacity of the Fc domain to FcγRIIIa. As discussed in further detail above, an increase in FcγRIIIa binding can enhance ADCC, which can be advantageous in certain antibody therapeutic applications in which cytotoxicity is desirable.

[0581] In some embodiments, an Fc domain is engineered such that it has reduced fucosylation or no fucosylation, compared to a parental Fc domain. In the context of an Fc domain, the terms "afucosylation," "afucosylated," "defucosylation," and "defucosylated" are used interchangeably, and generally refer to the absence or removal of core-fucose from the N-glycan attached to the CH2 domain of an Fc domain. For instance, an afucosylated antibody lacks core fucosylation in the Fc domain. As used herein, the phrase "a low level of fucosylation" or "reduced fucosylation" generally refers to an overall fucosylation level in a specific Fc domain that is no more than about 10.0%, no more than 5.0%, no more than 2.5%, no more than 1.0%, no more than about 0.5%, no more than 0.25%, no more than about 0.1%, or no more than 0.01%, compared to the fucosylation level of parental Fc domain. The term "% fucosylation" generally refers to the level of fucosylation in a specific Fc domain compared to that of a parental Fc domain. The % fucosylation can be measured according to any suitable method

known in the relevant art, such as, for example, by mass spectrometry (MS), HPLC-Chip Cube MS (Agilent), and reverse phase-HPLC.

[0582] In some embodiments, a particular level of fucosylation is desired. In some embodiments, a Fc variant is provided, wherein the Fc variant comprises a particular level of afucosylation. In some further embodiments, the fucosylation level of the Fc variant is no more than about 10.0%, no more than about 9.0%, no more than about 8.0%, no more than about 7.0%, no more than about 6.0%, no more than about 5.0%, no more than about 4.0%, no more than about 3.0%, no more than about 2.0%, no more than about 1.5%, no more than about 1.0%, no more than about 0.5%, no more than 0.25%, no more than about 0.1%, or no more than 0.01%, compared to that of a parental Fc domain.

[0583] In some embodiments, antibodies comprising afucosylated Fc domains can be enriched (to obtain a particular level of afucosylation) by affinity chromatography using resins conjugated with a fucose binding moiety, such as, for example, an antibody or lectin specific for fucose, with some embodiments finding particular utility when fucose is present in a 1-6 linkage (see, e.g., Kobayashi et al., 2012, J. Biol. Chem. 287:33973-82).

[0584] In some embodiments, the fucosylated species of the Fc domain can be separated from the afucosylated species of the Fc domain (to obtain a particular level of afucosylation) using an anti-fucose specific antibody in an affinity column. Alternatively, or in addition to, afucosylated species can be separated from fucosylated species based on the differential binding affinity to FcγRIIIa using affinity chromatography (again, to obtain a particular level of afucosylation).

H. Useful Formats of the Invention

[0585] As will be appreciated by those in the art, and discussed more fully below, the heterodimeric bispecific antibodies provided herein can take on a wide variety of configurations, as are generally depicted in Figs. 25A-25E. Some figures depict "single ended" configurations, where there is one type of specificity on one "arm" of the molecule and a different specificity on the other "arm." Other figures depict "dual ended" configurations, where there is at least one type of specificity at the "top" of the molecule and one or more different specificities at the "bottom" of the molecule. Thus, in some embodiments, the antibodies described herein are directed to novel immunoglobulin compositions that co-engage a first antigen and a second

antigen that are different.

[0586] As will be appreciated by those in the art, the heterodimeric formats of the antibodies described herein can have different valences (e.g., bivalent, trivalent, etc.), as well as specificity (e.g., bispecific). That is, in some embodiments, heterodimeric antibodies of the antibodies described herein can be bivalent and bispecific, wherein one target antigen (for instance and merely as an example, NKp46) is bound by a first binding domain and the other target antigen (for instance and merely as an example, MICA/B) is bound by a second binding domain. In other embodiments, the heterodimeric antibodies can be trivalent and bispecific, wherein the first target antigen is bound by two binding domains (i.e., a first binding domain and a second binding domain) and the second target antigen is bound by another and different binding domain. As will be appreciated by those skilled in the relevant art, the heterodimeric formats of the antibodies described herein can incorporate an ABD as described herein (i.e., an anti-MICA/B ABD or an anti-NKp46 ABD) in conjunction with an ABD capable of specifically binding a separate target antigen, wherein the separate target antigen can be any number of target antigens relevant to cancer therapy. In some embodiments, the target antigen is a tumor target antigen. It is expressly contemplated that such an antibody comprising: (i) an anti-MICA/B ABD or an anti-NKp46 ABD, and (ii) an anti-target antigen binding domain, can be configured in any number of different formats with varying valences and/or specificity. In some further embodiments, the target antigen comprises a tumor target antigen.

[0587] The antibodies described herein utilize anti-MICA/B ABDs in combination with anti-NKp46 ABDs. As will be appreciated by those in the art, any collection of anti-MICA/B CDRs, anti-MICA/B variable light and variable heavy domains, Fabs, and scFvs as described herein, and depicted in any of the figures can be used. Similarly, any of the anti-NKp46 ABDs can be used, whether CDRs, variable light and variable heavy domains, Fabs, and scFvs as described herein, and depicted in any of the Figures can be used, optionally and independently combined in any combination. Alternatively, or in addition to, the antibodies described herein can utilize (i) an anti-MICA/B ABD or an anti-NKp46 ABD as described herein, and (ii) an anti-target antigen binding domain. In some further embodiments, the target antigen comprises a tumor target antigen.

[0588] In some embodiments of a bispecific antibody having one of the following formats: (i) a

1 + 1 Fab × scFv format, (ii) a 2 + 1 Fab × Fab-scFv format, (iii) a 2 + 1 mAb-scFv format, (iv) a 1 + 1 Empty × Fab-scFv format, or (v) a 2 + 1 Fab2 × scFv format, the bispecific antibody comprises an anti-MICA/B ABD as described herein and an second ABD that binds to a different target antigen. In some further embodiments, the different target antigen comprises a tumor target antigen.

1. 1 + 1 Fab × scFv Format

[0589] One heterodimeric scaffold that finds particular use in the antibodies described herein is the "1 + 1 Fab × scFv" format (also referred to herein as the "1 + 1 Fab-scFv-Fc" or "bottle-opener" format), as is shown in Fig. 25A. In this embodiment, one heavy chain monomer of the antibody contains a single chain Fv ("scFv," as described below) and an Fc domain. The scFv includes a variable heavy domain (VH1) and a variable light domain (VL1), wherein the VH1 is attached to the VL1 using an scFv linker that can be charged (see, e.g., Fig. 8; SEQ ID NOs: XXX-XXX). The scFv is attached to the heavy chain using a domain linker (see, e.g., Fig. 9; SEQ ID NOs: XXX-XXX). The other heavy chain monomer is a "regular" heavy chain (V_H-CH1-hinge-CH2-CH3). The 1 + 1 Fab × scFv format also includes a light chain that interacts with the V_H-CH1 to form a Fab. This structure is sometimes referred to herein as the "bottle-opener" format due to a rough visual similarity to a bottle-opener. The two heavy chain monomers are brought together by the use of amino acid variants (e.g., heterodimerization variants, discussed above) in the constant regions (e.g., the Fc domain, the CH1 domain, and/or the hinge region) that promote the formation of heterodimeric antibodies, as is described more fully below.

[0590] There are several distinct advantages to the present "1 + 1 Fab × scFv" format. As is known in the art, antibody analogs relying on two scFv constructs often have stability and aggregation problems, which can be alleviated in the antibodies described herein by the addition of a "regular" heavy and light chain pairing. In addition, as opposed to formats that rely on two heavy chains and two light chains, there is no issue with the incorrect pairing of heavy and light chains (e.g., heavy 1 pairing with light 2, etc.).

[0591] Many of the embodiments outlined herein rely in general on the 1 + 1 Fab × scFv or "bottle opener" format antibody that comprises a first monomer comprising an scFv, comprising a variable heavy and a variable light domain, covalently attached using an scFv linker (charged,

in many but not all instances), where the scFv is covalently attached to the N-terminus of a first Fc domain, usually through a domain linker. The domain linker can be either charged or uncharged, and exogenous or endogenous (e.g., all or part of the native hinge domain). Any suitable linker can be used to attach the scFv to the N-terminus of the first Fc domain. In some embodiments, the domain linker is chosen from the domain linkers in Fig. 9. The second monomer of the 1 + 1 Fab × scFv format or "bottle opener" format is a heavy chain, and the composition further comprises a light chain.

[0592] In general, in many preferred embodiments, the scFv is the domain that binds to NKp46, and the Fab forms a MICA/B binding domain. However, in several preferred embodiments, the scFv is the domain that binds to MICA/B, and the Fab forms a NKp46 binding domain. An exemplary anti-NKp46 × anti-MICA/B bispecific antibody in the 1 + 1 Fab × scFv is depicted in Fig. 25A. Exemplary anti-NKp46 × anti-MICA/B bispecific antibodies in the 1 + 1 Fab-scFv-Fc format are depicted in Figs. 31A and 31B.

[0593] In addition, the Fc domains of the antibodies described herein generally include Fc ADCC variants (including, but not limited to, those shown in Figs. 7 and 10), skew variants (e.g., a set of amino acid substitutions as shown in Figs. 4, 10, and 11, with particularly useful skew variants being selected from the group including: (i) S364K/E357Q:L368D/K370S, (ii) L368D/K370S:S364K, (iii) L368E/K370S:S364K, (iv) T411T/E360E/Q362E:D401K, (v) L368D/K370S:S364K/E357L, (vi) K370S:S364K/E357Q, (vii) T366S/L368A/Y407V:T366W, and (viii) T366S/L368A/Y407V/Y349C:T366W/S354C), optionally ablation variants (including those shown in Fig. 6), optionally charged scFv linkers (including those shown in Fig. 8; see, e.g., SEQ ID NOs: XXX-XXX), and the heavy chain comprises pI variants (including those shown in Fig. 4, 5, and 10).

[0594] In certain embodiments the 1 + 1 Fab × scFv scaffold format includes a first monomer that includes a scFv-domain linker-CH2-CH3 monomer, a second monomer that includes a first variable heavy domain-CH1-hinge-cH2-CH3 monomer, and a third monomer that includes a first variable light domain. In some embodiments, the CH2-CH3 of the first monomer is a first variant Fc domain and the CH2-CH3 of the second monomer is a second variant Fc domain. In some embodiments, the scFv includes a scFv variable heavy domain and a scFv variable light domain that form a NKp46 binding moiety. In other embodiments, the scFv includes a scFv variable

heavy domain and a scFv variable light domain that form a MICA/B binding moiety. In certain embodiments, the scFv variable heavy domain and scFv variable light domain are covalently attached using an scFv linker (charged, in many but not all instances; see, e.g., Fig. 8 and SEQ ID NOs: XXX-XXX)). In some embodiments, the first variable heavy domain and first variable light domain form a MICA/B binding domain. In other embodiments, the first variable heavy domain and first variable light domain form a NKp46 binding domain.

[0595] Any suitable NKp46 ABD and/or MICA/B ABD can be included in the 1 + 1 Fab × scFv format antibody, including those provided herein. NKp46 binding domain sequences finding particular use in these embodiments include, but are not limited to: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, or variants thereof (see, e.g., Figs. 23 and 24). MICA/B ABDs that are of particular use in these embodiments include, but are not limited to, V_H and V_L domains selected from V_H/V_L pairs selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii)

SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ

ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, or variants thereof (see, e.g., Figs. 21 and 22).

[0596] Similarly, any suitable MICA/B ABD and/or NKp46 ABD can be included in the 1 + 1 Fab × scFv format antibody, including those provided herein. MICA/B binding domain sequences finding particular use in these embodiments include, but are not limited to: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5

[MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ

ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, or variants thereof (see, e.g., Figs. 21 and 22). NKp46 ABDs that are of particular use in these embodiments include, but are not limited to, V_H and V_L domains selected from V_H/V_L pairs selected from the group including: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, or variants thereof (see, e.g., Figs. 23 and 24).

[0597] In particular embodiments, the αNKp46 V_H/V_L pairs are selected from the group including: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, or a variant thereof (see, e.g., Figs. 23 and 24).

[0598] In particular embodiments, the αMICA/B V_H/V_L pairs are selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv)

SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX

for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, or a variant thereof (see, e.g., Figs. 21 and 22).

[0599] In some embodiments, the 1 + 1 Fab × scFv format includes Fc ADCC variants, skew variants, pI variants, and/or ablation variants. Accordingly, some embodiments include 1 + 1 Fab × scFv formats that comprise: (i) a first monomer (the "scFv monomer") that comprises a charged scFv linker (with the "+H" sequence of Fig. 8 (i.e., SEQ ID NO: XXX) being preferred in some embodiments), the skew variants S364K/E357Q, the ablation variants E233P/L234V/L235A/G236del/S267K, and an scFv that binds to a first target antigen as outlined herein, (ii) a second monomer (the "Fab monomer") that comprises the skew variants L368D/K370S, the pI variants N208D/Q295E/N384D/Q418E/N421D, the ablation variants E233P/L234V/L235A/G236del/S267K, and a variable heavy domain (V_H), and (iii) a light chain that includes a variable light domain (V_L) and a constant light domain (C_L), wherein numbering is according to EU numbering. In some embodiments, the first target antigen is NKp46, and the first variable heavy domain and the first variable light domain make up a MICA/B binding moiety. In other embodiments, the first target antigen is MICA/B, and the first variable heavy domain and the first variable light domain make up a NKp46 binding moiety. NKp46 binding domain sequences finding particular use in these embodiments include, but are not limited to: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, or variants thereof (see, e.g., Figs. 23 and 24). MICA/B binding domain sequences finding particular use in these embodiments include, but are not limited to: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos:

XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii)

SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9

[MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, or variants thereof (see, e.g., Figs. 21 and 22).

[0600] In some embodiments, the 1 + 1 Fab × scFv format includes skew variants (see, e.g., Figs. 4, 10, and 11), pI variants (see, e.g., Figs. 4, 5, and 10), ablation variants (see, e.g., Fig. 6, and/or FcRn variants (see, e.g., Fig. 10). Accordingly, some embodiments include 1 + 1 Fab × scFv formats that comprise: (i) a first monomer (the "scFv monomer") that comprises a charged scFv linker (with the "+H" sequence of Fig. 8 (i.e., SEQ ID NO: XXX) being preferred in some embodiments), the skew variants S364K/E357Q, the ablation variants E233P/L234V/L235A/G236del/S267K, the FcRn variants M428L/N434S and an scFv that binds to a first target antigen as outlined herein, (ii) a second monomer (the "Fab monomer") that comprises the skew variants L368D/K370S, the pI variants N208D/Q295E/N384D/Q418E/N421D, the ablation variants E233P/L234V/L235A/G236del/S267K, the FcRn variants M428L/N434S, and a variable heavy domain, and (iii) a light chain that includes a variable light domain (V_L) and a constant light domain (C_L), wherein numbering is according to EU numbering. In some embodiments, the first target antigen is NKp46, and the first variable heavy domain and the first variable light domain make up a MICA/B binding moiety. In other embodiments, the first target antigen is MICA/B, and the first variable heavy domain and the first variable light domain make up a NKp46 binding moiety. NKp46 binding domain sequences finding particular use in these embodiments include, but are not limited to: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, or variants thereof (see, e.g., Figs. 23 and 24). MICA/B binding domain sequences finding particular use in these embodiments include, but are not limited to: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and

XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and

XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, or variants thereof (see, e.g., Figs. 21 and 22).

[0601] Particularly useful NKp46 and MICA/B sequence combinations for use with the 1 + 1 Fab × scFv include, for example, those disclosed in Figs. 31A and 31B.

[0602] Figs. 12-15 show exemplary Fc domain sequences that are useful in the 1 + 1 Fab × scFv format antibodies. The "monomer 1" sequences depicted in Figs. 12-15 typically refer to the Fc domain of the "Fab-Fc heavy chain," and the "monomer 2" sequences refer to the Fc domain of the "scFv-Fc heavy chain." In some embodiments, the heterodimeric Fc backbones of the first and second monomers of the 1 + 1 Fab × scFv format include a backbone pair set forth in Figs. 12-15.

[0603] In some embodiments, one or both of the Fc domains comprising the heterodimeric Fc backbone pairs are configured such that one or both of the Fc domains have wildtype FcγR effector function. In some embodiments, the heterodimeric Fc backbone pairs have wildtype FcγR effector function, including, but not limited to, those pairs of: SEQ ID NOs: XXX and XXX, as shown in Figs. 13A-13C.

[0604] In some embodiments, one or both of the Fc domains comprising the heterodimeric Fc backbone pairs include amino acid substitutions such that one or both of the Fc domains have increased ADCC activity. In certain embodiments, the amino acid substitutions include one or more of: S239D, I332E, or S239D/I332E, or any of the Fc ADCC variants shown in Figs. 7 and 10. In some instances, only monomer 1 or monomer 2 of the heterodimeric Fc backbone pairs include amino acid substitutions resulting in increased ADCC activity. In such an instance, the pair of heterodimeric Fc backbones may be referred to as an asymmetric, ADCC-enhanced heterodimeric Fc backbone pair. In other instances, both monomers (i.e., monomer 1 and monomer 2) of the heterodimeric Fc backbone pairs independently include one or more amino acid substitutions conferring an increased ADCC activity. In such an instance, the pair of heterodimeric Fc backbones may be referred to as a symmetric, ADCC-enhanced heterodimeric Fc backbone pair. As used herein, the terms "asymmetric" and "symmetric" are not intended to mean that the heterodimeric Fc backbone pairs comprise identical mutations, but rather that only one Fc domain (in the case of asymmetric pairs) or both Fc domains (in the case of symmetric pairs) includes amino acid variants conferring an increase in ADCC activity. In some instances, monomer 1 and monomer 2 can contain identical amino acid substitutions (e.g., both monomers contain a S239D substitution, an I332E substitution, or both substitutions are present on both monomers). In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same (e.g., monomer 1 may contain the S239D/I332E substitutions, and

monomer 2 contains the S239D substitution and is WT with respect to the 332 residue (or the reverse where monomer 2 is WT with respect to the 239 residue and contains the I332E substitution); monomer 2 may contain the S239D/I332E substitutions, and monomer 1 contains the S239D substitution and is WT with respect to the 332 residue (or the reverse where monomer 1 is WT with respect to the 239 residue and contains the I332E substitution); etc.). In still other instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer (e.g., S239D on monomer 1 and I332E on monomer 2, or the reverse). In some embodiments, the heterodimeric Fc backbone pairs have increased ADCC activity, including, but not limited to, those pairs of: SEQ ID NOs: XXX and XXX, as shown in Figs. 14A-14C.

[0605] In some embodiments, one or both of the Fc domains comprising the heterodimeric Fc backbone pairs include amino acid substitutions such that one or both of the Fc domains have improved serum half-life. In certain embodiments, the amino acid substitutions include one or more of: M428L, N434S, N434A, M428L/N434S, M252Y/S254T/T256E, or M428L/N434A. In some instances, only monomer 1 or monomer 2 of the heterodimeric Fc backbone pairs include amino acid substitutions resulting in improved serum half-life. In such an instance, the pair of heterodimeric Fc backbones may be referred to as an asymmetric, Xtend heterodimeric Fc backbone pair. In other instances, both monomers (i.e., monomer 1 and monomer 2) of the heterodimeric Fc backbone pairs independently include one or more amino acid substitutions conferring an increase serum half-life. In such an instance, the pair of heterodimeric Fc backbones may be referred to as a symmetric, Xtend heterodimeric Fc backbone pair. As used herein, the terms “asymmetric” and “symmetric” are not intended to mean that the heterodimeric Fc backbone pairs comprise identical mutations, but rather that only one Fc domain (in the case of asymmetric pairs) or both Fc domains (in the case of symmetric pairs) contains amino acid variants conferring an increased serum half-life. In some instances, monomer 1 and monomer 2 can contain identical amino acid substitutions. In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same (e.g., both monomers contain the M428L substitution, one monomer further contains the N434S substitution, and the other monomer contains the N434A mutation). In some instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer (e.g., N434S on one monomer, and N434A on the other monomer).

[0606] In some embodiments, one or both of the Fc domains comprising the heterodimeric Fc backbone pairs include amino acid substitutions such that one or both of the Fc domains have increased ADCC activity and improved serum half-life. In certain embodiments, the amino acid substitutions include: (i) one or more of amino acid substitutions selected from the group including: S239D, I332E, and S239D/I332E, or any of the Fc ADCC variants shown in Figs. 7 and 10, and (ii) one or more amino acid substitutions selected from the group including: M428L, N434S, N434A, M428L/N434S, M252Y/S254T/T256E, and M428L/N434A. In some instances, only monomer 1 or monomer 2 of the heterodimeric Fc backbone pairs include amino acid substitutions resulting in increased ADCC and increased serum half-life. In such an instance, the pair of heterodimeric Fc backbones may be referred to as an asymmetric, ADCC-enhanced heterodimeric Fc backbone pair with Xtend. In other instances, both monomers (i.e., monomer 1 and monomer 2) of the heterodimeric Fc backbone pairs independently comprise amino acid substitutions resulting in increased ADCC and increased serum half-life. In such an instance, the pair of heterodimeric Fc backbones may be referred to as a symmetric, ADCC-enhanced heterodimeric Fc backbone pair with Xtend. As used herein, the terms "asymmetric" and "symmetric" are not intended to mean that the heterodimeric Fc backbone pairs comprise identical mutations, but rather that only one Fc domain (in the case of asymmetric pairs) or both Fc domains (in the case of symmetric pairs) contains amino acid variants conferring an increase in ADCC activity and improved serum half-life. In some instances, monomer 1 and monomer 2 can contain identical amino acid substitutions. In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same. In still other instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer. In some embodiments, the heterodimeric Fc backbone pairs have increased ADCC activity and increased serum-half-life, including, but not limited to, those pairs of: SEQ ID NOs: XXX and XXX, as shown in Figs. 15A-15C.

[0607] In some embodiments, one or both of the Fc domains comprising the heterodimeric Fc backbone pairs include amino acid substitutions such that one or both of the Fc domains have an ablated FcγR function. Nonlimiting examples of amino acid substitutions (and combinations thereof) conferring an ablated FcγR function are shown in, for example, Fig. 6. In some instances, only monomer 1 or monomer 2 of the heterodimeric Fc backbone pairs include amino acid substitutions that result in an ablated FcγR function (see, e.g., Fig. 6). In such an instance,

the pair of heterodimeric Fc backbones may be referred to as an asymmetric, FcKO heterodimeric Fc backbone pair. In other instances, both monomers (i.e., monomer 1 and monomer 2) of the heterodimeric Fc backbone pairs independently comprise one or more amino acid substitutions resulting in an ablated FcγR function (see, e.g., Fig. 6). In such an instance, the pair of heterodimeric Fc backbones may be referred to as a symmetric, FcKO heterodimeric Fc backbone pair. As used herein, the terms "asymmetric" and "symmetric" are not intended to mean that the heterodimeric Fc backbone pairs comprise identical mutations, but rather that only one Fc domain (in the case of asymmetric pairs) or both Fc domains (in the case of symmetric pairs) contains amino acid variants resulting in an ablated FcγR function. In some embodiments, the heterodimeric Fc backbone pairs include amino acid substitutions such that the Fc domains have an ablated FcγR effector function, including, but not limited to, those pairs of: SEQ ID NOs: XXX and XXX, as shown in Figs. 12A-12E.

[0608] Further, Fig. 19 provides useful C_L sequences that can be used with this format (see, e.g., SEQ ID NOs: XXX-XXX).

[0609] In some embodiments, any of the V_H and V_L sequences depicted herein (including all V_H and V_L sequences depicted in the figures and sequence listing, including those directed to NKp46) can be added to the bottle opener backbone formats of Figs. 12-15 as the "Fab side," using any of the anti-NKp46 scFv sequences shown in the Figures and sequence listing. Alternatively, any of the V_H and V_L sequences depicted herein (including all V_H and V_L sequences depicted in the figures and sequence listing, including those directed to MICA/B) can be added to the bottle opener backbone formats of Figs. 12-15 as the "Fab side," using any of the anti-MICA/B scFv sequences shown in the Figures and sequence listing.

[0610] For the 1 + 1 Fab × scFv backbones depicted in Figs. 12-15, NKp46 binding domain sequences finding particular use in these embodiments include, but are not limited to, NKp46 binding domain 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1 (SEQ ID NOs: XXX and XXX), and NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L (SEQ ID NOs: XXX and XXX) (see, e.g., Figs. 23 and 24) attached as the scFv side of the backbones shown in Figs. 12-15. Alternatively, MICA/B binding domain sequences finding particular use in these embodiments include, but are not limited to, MICA/B binding domain (i) D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (ii)

D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (iii) D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (iv) D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (v) D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (vi) 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (vii) 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (viii) 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (ix) 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (x) 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xi) D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xii) D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xiii) D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xiv) D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xv) D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xvi) D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xvii) D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xviii) D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xix) D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xx) D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxi) D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxii) D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxiii) D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxiv) D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxv) D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxvi) D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxvii) D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxviii) D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxix) D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxx) D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxi) D105317_1A2

[MICA/B]_H0_D105317_1A2 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxxii) D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxxiii) D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxiv) D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxxv) D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxvi) D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxxvii) D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxxviii) D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxix) D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xl) D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xli) D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlii) D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xliii) D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xliv) D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlv) D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlvi) D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlvii) D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlviii) D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlix) D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (l) D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (li) D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lii) D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (liii) D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (liv) D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lv) D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lvi) D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lvii) 3F9[MICA/B]_H0_3F9[MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lviii) 6E1[MICA/B]_H0_6E1[MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lix) 7C6[MICA/B]_H0_7C6[MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lx) 13A9

[MICA/B]_H0_13A9 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), and (lxi) 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX) (see, e.g., Figs. 21 and 22) attached as the scFv side of the backbones shown in Figs. 12-15.

[0611] Exemplary anti-NKp46 × anti-MICA/B 1 + 1 Fab × scFv format antibodies are depicted in Figs. 31A and 31B. In some embodiments, such bispecific antibodies include, but are not limited to: XENP46810, XENP46811, and XENP46812, as are shown in Figs. 31A and 31B. In some embodiments, the anti-NKp46 × anti-MICA/B bispecific antibody is in a 1 + 1 Fab × scFv format, and the bispecific antibody comprises: (i) a first monomer, (ii) a second monomer, and (iii) a light chain. In an exemplary embodiment, the first monomer comprises SEQ ID NO: XXX, the second monomer comprises SEQ ID NO: XXX, and the light chain comprises SEQ ID NO: XXX; see, e.g., Fig. 31.

2. 2 + 1 Fab × Fab-scFv Format

[0612] One heterodimeric scaffold that finds particular use in the antibodies described herein is the "2 + 1 Fab × Fab-scFv" format (also referred to herein as the "2 + 1 Fab_2-scFv-Fc" or "central-scFv" format), as is shown in Fig. 25C. In this embodiment, the format relies on the use of an inserted scFv domain thus forming a third antigen binding domain, wherein the Fab portions of the two monomers bind MICA/B and the "extra" scFv domain binds NKp46. Alternatively, the Fab portions of the two monomers can bind NKp46 and the "extra" scFv domain can bind MICA/B. The scFv domain is inserted between the Fc domain and the CH1-Fv region of one of the monomers, thus providing the third antigen binding domain. These MICA/B antibodies find use, for example, in the treatment of MICA/B-associated cancers.

[0613] In this embodiment, one monomer comprises a first heavy chain comprising a first variable heavy domain, a CH1 domain (and optional hinge) and Fc domain, with a scFv comprising a scFv variable light domain, an scFv linker and a scFv variable heavy domain. The scFv is covalently attached between the C-terminus of the CH1 domain of the heavy constant domain and the N-terminus of the first Fc domain using optional domain linkers (VH1-CH1-[optional linker]-VH2-scFv linker-VL2-[optional linker]-CH2-CH3, or the opposite orientation for the scFv, VH1-CH1-[optional linker]-VL2-scFv linker-VH2-[optional linker]-CH2-CH3). The optional linkers can be any suitable peptide linkers, including, for example, the domain linkers included in Fig. 9 (see, e.g., SEQ ID NOs: XXX-XXX). In some embodiments, the

optional linker is a hinge or a fragment thereof. The other monomer is a standard Fab side (i.e., VH1-CH1-hinge-CH2-CH3). This embodiment further utilizes a common light chain comprising a variable light domain and a constant light domain, that associates with the heavy chains to form two identical Fabs that bind MICA/B (or, in other embodiments, to NKp46). As for many of the embodiments herein, these constructs include skew variants, pI variants, ablation variants, additional Fc variants, etc. as desired and described herein (see, e.g., Figs. 4-7, 10, and 11).

[0614] In one embodiment, the 2 + 1 Fab × Fab-scFv format antibody includes an scFv with the V_H and V_L of a NKp46 binding domain sequence depicted in Figs. 23 and 24, or a variant thereof. In one embodiment, the 2 + 1 Fab × Fab-scFv format includes two Fabs having the V_H and V_L of a MICA/B binding domain as depicted in Figs. 21 and 22, or a variant thereof.

[0615] In exemplary embodiments, the MICA/B binding domain of the 2 + 1 Fab × Fab-scFv anti-NKp46 × anti-MICA/B bispecific antibody includes the V_H and V_L NKp46 binding domain sequences finding particular use in these embodiments include, but are not limited to: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, or a variant thereof (see, e.g., Figs. 23 and 24).

[0616] In particular embodiments, the αNKp46 V_H and V_L binding domain sequences are selected from the group including: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, or a variant thereof (see, e.g., Figs. 23 and 24).

[0617] Any suitable MICA/B ABD can be included in the 2 + 1 Fab × Fab-scFv format antibody, included those provided herein. MICA/B ABDs that are of particular use in these embodiments include, but are not limited to, V_H and V_L domains selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID

Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for

D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0.

[0618] In particular embodiments, the αMICA/B V_H/V_L pairs are selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1

[MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos:

XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX

and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0.

[0619] In addition, the Fc domains of the 2 + 1 Fab × Fab-scFv format can comprise Fc ADCC variants (including, but not limited to, those shown in Figs. 7 and 10), skew variants (e.g., a set of amino acid substitutions as shown in Figs. 4, 10, and 11, with particularly useful skew variants being selected from the group including: (i) S364K/E357Q:L368D/K370S, (ii) L368D/K370S:S364K, (iii) L368E/K370S:S364K, (iv) T411T/E360E/Q362E:D401K, (v) L368D/K370S:S364K/E357L, (vi) K370S:S364K/E357Q, (vii) T366S/L368A/Y407V:T366W, and (viii) T366S/L368A/Y407V/Y349C:T366W/S354C), optionally ablation variants (including those shown in Fig. 6), optionally charged scFv linkers (including those shown in Fig. 8; see, e.g., SEQ ID NOs: XXX-XXX), and the heavy chain comprises pI variants (including those shown in Fig. 4, 5, and 10).

[0620] In some embodiments, the 2 + 1 Fab × Fab-scFv format antibody includes Fc ADCC variants (see, e.g., Figs. 7 and 10), skew variants (see, e.g., Figs. 4, 10, and 11), and/or pI variants (see, e.g., Figs. 4, 5, and 10). Accordingly, some embodiments include 2 + 1 Fab × Fab-scFv formats that comprise: (i) a first monomer (the "Fab-scFv-Fc" monomer) that comprises the Fc ADCC variants S239D/I332E, the skew variants S364K/E357Q, and a variable heavy domain that, with the variable light domain of the common light chain, makes up an Fv that binds to MICA/B as outlined herein, and an scFv domain that binds to NKp46, (ii) a second monomer (the "Fab-Fc" monomer) that comprises the skew variants L368D/K370S, the pI variants N208D/Q295E/N384D/Q418E/N421D, and a variable heavy domain that, with variable light domain of the common light chain, makes up an Fv that binds to MICA/B as outlined herein, and (iii) a common light chain comprising the variable light domain and a constant light domain, where numbering is according to EU numbering. Further, bispecific antibodies in the 2 + 1 Fab × Fab-scFv format can also include one or more Fc domains with one or more ablation variants (see, e.g., Fig. 6). NKp46 binding domain sequences finding particular use in these embodiments include, but are not limited to: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX and XXX for

NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, or variants thereof (see, e.g., Figs. 23 and 24). MICA/B binding domain sequences finding particular use in these embodiments include, but are not limited to: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7

[MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos:

XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, or variants thereof (see, e.g., Figs. 21 and 22).

[0621] In some embodiments, the 2 + 1 Fab × Fab-scFv format antibody includes Fc ADCC variants (see, e.g., Figs. 7 and 10), skew variants (see, e.g., Figs. 4, 10, and 11), pI variants (see, e.g., Figs. 4, 5, and 10), and/or FcRn variants (see, e.g., Fig. 10). Accordingly, some embodiments 2 + 1 Fab × Fab-scFv formats that comprise: (i) a first monomer (the "Fab-scFv-Fc" monomer) that comprises the Fc ADCC variants S239D/I332E, the skew variants S364K/E357Q, the FcRn variants M428L/N434S, and a variable heavy domain that, with the variable light domain of the common light chain, makes up an Fv that binds to MICA/B as outlined herein, and an scFv domain that binds to NKp46, (ii) a second monomer (the "Fab-Fc" monomer) that comprises the skew variants L368D/K370S, the pI variants N208D/Q295E/N384D/Q418E/N421D, the FcRn variants M428L/N434S, and a variable heavy domain that, with variable light domain of the common light chain, makes up an Fv that binds to MICA/B as outlined herein, and (iii) a common light chain comprising the variable light domain and a constant light domain, where numbering is according to EU numbering. Further, bispecific antibodies in the 2 + 1 Fab × Fab-scFv format can also include one or more Fc domains with one or more ablation variants (see, e.g., Fig. 6). NKp46 binding domain sequences finding particular use in these embodiments include, but are not limited to: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, or variants thereof (see, e.g., Figs. 23 and 24). MICA/B binding domain sequences finding particular use in these embodiments include, but are not limited to: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ

ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2

[MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, or variants thereof (see, e.g., Figs. 21 and 22).

[0622] Figs. 12-15 show some exemplary Fc domain sequences that are useful with the 2 + 1 Fab × Fab-scFv format. The "monomer 1" sequences depicted in Figs. 12-15 typically refer to the Fc domain of the "Fab-Fc heavy chain," and the "monomer 2" sequences refer to the Fc domain of the "Fab-scFv-Fc heavy chain."

[0623] In some embodiments, one or both of the Fc domains comprising the heterodimeric Fc backbone pairs are configured such that one or both of the Fc domains have wildtype FcγR effector function. In some embodiments, the heterodimeric Fc backbone pairs have wildtype FcγR effector function, including, but not limited to, those pairs of: SEQ ID NOs: XXX and XXX, as shown in Figs. 13A-13C.

[0624] In some embodiments, one or both of the Fc domains comprising the heterodimeric Fc backbone pairs include amino acid substitutions such that one or both of the Fc domains have increased ADCC activity. In certain embodiments, the amino acid substitutions include one or more of: S239D, I332E, or S239D/I332E, or any of the Fc ADCC variants shown in Figs. 7 and 10. In some instances, only monomer 1 or monomer 2 of the heterodimeric Fc backbone pairs include amino acid substitutions resulting in increased ADCC activity. In such an instance, the pair of heterodimeric Fc backbones may be referred to as an asymmetric, ADCC-enhanced heterodimeric Fc backbone pair. In other instances, both monomers (i.e., monomer 1 and monomer 2) of the heterodimeric Fc backbone pairs independently include one or more amino acid substitutions conferring an increased ADCC activity. In such an instance, the pair of heterodimeric Fc backbones may be referred to as a symmetric, ADCC-enhanced heterodimeric Fc backbone pair. As used herein, the terms "asymmetric" and "symmetric" are not intended to mean that the heterodimeric Fc backbone pairs comprise identical mutations, but rather that only one Fc domain (in the case of asymmetric pairs) or both Fc domains (in the case of symmetric pairs) includes amino acid variants conferring an increase in ADCC activity. In some instances, monomer 1 and monomer 2 can contain identical amino acid substitutions (e.g., both monomers contain a S239D substitution, an I332E substitution, or both substitutions are present on both monomers). In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same (e.g., monomer 1 may contain the S239D/I332E substitutions, and monomer 2 contains the S239D substitution and is WT with respect to the 332 residue (or the reverse where monomer 2 is WT with respect to the 239 residue and contains the I332E

substitution); monomer 2 may contain the S239D/I332E substitutions, and monomer 1 contains the S239D substitution and is WT with respect to the 332 residue (or the reverse where monomer 1 is WT with respect to the 239 residue and contains the I332E substitution); etc.). In still other instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer (e.g., S239D on monomer 1 and I332E on monomer 2, or the reverse). In some embodiments, the heterodimeric Fc backbone pairs have increased ADCC activity, including, but not limited to, those pairs of: SEQ ID NOs: XXX and XXX, as shown in Figs. 14A-14C.

[0625] In some embodiments, one or both of the Fc domains comprising the heterodimeric Fc backbone pairs include amino acid substitutions such that one or both of the Fc domains have improved serum half-life. In certain embodiments, the amino acid substitutions include one or more of: M428L, N434S, N434A, M428L/N434S, M252Y/S254T/T256E, or M428L/N434A. In some instances, only monomer 1 or monomer 2 of the heterodimeric Fc backbone pairs include amino acid substitutions resulting in improved serum half-life. In such an instance, the pair of heterodimeric Fc backbones may be referred to as an asymmetric, Xtend heterodimeric Fc backbone pair. In other instances, both monomers (i.e., monomer 1 and monomer 2) of the heterodimeric Fc backbone pairs independently include one or more amino acid substitutions conferring an increase serum half-life. In such an instance, the pair of heterodimeric Fc backbones may be referred to as a symmetric, Xtend heterodimeric Fc backbone pair. As used herein, the terms “asymmetric” and “symmetric” are not intended to mean that the heterodimeric Fc backbone pairs comprise identical mutations, but rather that only one Fc domain (in the case of asymmetric pairs) or both Fc domains (in the case of symmetric pairs) contains amino acid variants conferring an increased serum half-life. In some instances, monomer 1 and monomer 2 can contain identical amino acid substitutions. In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same (e.g., both monomers contain the M428L substitution, one monomer further contains the N434S substitution, and the other monomer contains the N434A mutation). In some instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer (e.g., N434S on one monomer, and N434A on the other monomer).

[0626] In some embodiments, one or both of the Fc domains comprising the heterodimeric Fc backbone pairs include amino acid substitutions such that one or both of the Fc domains have

increased ADCC activity and improved serum half-life. In certain embodiments, the amino acid substitutions include: (i) one or more of amino acid substitutions selected from the group including: S239D, I332E, and S239D/I332E, or any of the Fc ADCC variants shown in Figs. 7 and 10, and (ii) one or more amino acid substitutions selected from the group including: M428L, N434S, N434A, M428L/N434S, M252Y/S254T/T256E, and M428L/N434A. In some instances, only monomer 1 or monomer 2 of the heterodimeric Fc backbone pairs include amino acid substitutions resulting in increased ADCC and increased serum half-life. In such an instance, the pair of heterodimeric Fc backbones may be referred to as an asymmetric, ADCC-enhanced heterodimeric Fc backbone pair with Xtend. In other instances, both monomers (i.e., monomer 1 and monomer 2) of the heterodimeric Fc backbone pairs independently comprise amino acid substitutions resulting in increased ADCC and increased serum half-life. In such an instance, the pair of heterodimeric Fc backbones may be referred to as a symmetric, ADCC-enhanced heterodimeric Fc backbone pair with Xtend. As used herein, the terms "asymmetric" and "symmetric" are not intended to mean that the heterodimeric Fc backbone pairs comprise identical mutations, but rather that only one Fc domain (in the case of asymmetric pairs) or both Fc domains (in the case of symmetric pairs) contains amino acid variants conferring an increase in ADCC activity and improved serum half-life. In some instances, monomer 1 and monomer 2 can contain identical amino acid substitutions. In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same. In still other instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer. In some embodiments, the heterodimeric Fc backbone pairs have increased ADCC activity and increased serum-half-life, including, but not limited to, those pairs of: SEQ ID NOs: XXX and XXX, as shown in Figs. 15A-15C.

[0627] In some embodiments, one or both of the Fc domains comprising the heterodimeric Fc backbone pairs include amino acid substitutions such that one or both of the Fc domains have an ablated FcγR function. Nonlimiting examples of amino acid substitutions (and combinations thereof) conferring an ablated FcγR function are shown in, for example, Fig. 6. In some instances, only monomer 1 or monomer 2 of the heterodimeric Fc backbone pairs include amino acid substitutions that result in an ablated FcγR function (see, e.g., Fig. 6). In such an instance, the pair of heterodimeric Fc backbones may be referred to as an asymmetric, FcKO heterodimeric Fc backbone pair. In other instances, both monomers (i.e., monomer 1 and

monomer 2) of the heterodimeric Fc backbone pairs independently comprise one or more amino acid substitutions resulting in an ablated FcγR function (see, e.g., Fig. 6). In such an instance, the pair of heterodimeric Fc backbones may be referred to as a symmetric, FcKO heterodimeric Fc backbone pair. As used herein, the terms "asymmetric" and "symmetric" are not intended to mean that the heterodimeric Fc backbone pairs comprise identical mutations, but rather that only one Fc domain (in the case of asymmetric pairs) or both Fc domains (in the case of symmetric pairs) contains amino acid variants resulting in an ablated FcγR function. In some embodiments, the heterodimeric Fc backbone pairs include amino acid substitutions such that the Fc domains have an ablated FcγR effector function, including, but not limited to, those pairs of: SEQ ID NOs: XXX and XXX, as shown in Figs. 12A-12E.

[0628] Further, Fig. 19 provides useful C_L sequences that can be used with this format.

[0629] Exemplary anti-NKp46 × anti-MICA/B 2 + 1 Fab × Fab-scFv format antibodies are depicted in Fig. 33. In some embodiments, such bispecific antibodies include, but are not limited to: XENP47438 and XENP47439, as are shown in Fig. 33. In some embodiments, the anti-NKp46 × anti-MICA/B bispecific antibody is in a 2 + 1 Fab × Fab-scFv format, and the bispecific antibody comprises: (i) a first monomer, (ii) a second monomer, and (iii) a light chain. In an exemplary embodiment, the first monomer comprises SEQ ID NO: XXX, the second monomer comprises SEQ ID NO: XXX, and the light chain comprises SEQ ID NO: XXX; see, e.g., Fig. 33.

3. <u>2 + 1 mAb-scFv Format</u>

[0630] One heterodimeric scaffold that finds particular use in the antibodies described herein is the "2 + 1 mAb-scFv" format (also referred to herein as the "mAb-scFv" format), as is shown in Fig. 25E. In this embodiment, the format relies on the use of a C-terminal attachment of a scFv to one of the monomers, thus forming a third antigen binding domain, wherein the Fab portions of the two monomers bind MICA/B and the "extra" scFv domain binds NKp46. Alternatively, the Fab portions of the two monomers can bind NKp46 and the "extra" scFv domain can bind MICA/B. Thus, the first monomer comprises a first heavy chain (comprising a variable heavy domain and a constant domain), with a C-terminally covalently attached scFv comprising a scFv variable light domain, an scFv linker and a scFv variable heavy domain in either orientation (VH1-CH1-hinge-CH2-CH3-[optional linker]-VH2-scFv linker-VL2 or VH1-CH1-hinge-CH2-

CH3-[optional linker]-VL2-scFv linker-VH2). This embodiment further utilizes a common light chain comprising a variable light domain and a constant light domain, that associates with the heavy chains to form two identical Fabs that bind MICA/B (or, in other embodiments, to NKp46). In some embodiments, an exemplary 2 + 1 mAb-scFv format includes: (i) a first Fc comprising an N-terminal Fab arm that binds MICA/B, (ii) a second Fc comprising an N-terminal Fab arm that binds MICA/B, and (iii) a C-terminal scFv that binds NKp46; or the reverse, wherein the Fab arms bind NKp46 and the C-terminal scFv binds MICA/B. Such a format can include a first monomer comprising, from the N-terminus to the C-terminus, VH1-CH1-hinge-CH2-CH3, a second monomer comprising, from the N-terminus to the C-terminus, VH1-CH1-hinge-CH2-CH3-scFv, and a third monomer comprising, from the N-terminus to the C-terminus, V_{L}-C_{L}, wherein the first VH1-V_{L} pair bind MICA/B, the second VH1-V_{L} pair bind MICA/B, and the scFv binds NKp46. In another embodiment of the 2 + 1 mAb-scFv format, the first and second VH1-V_{L} pairs bind NKp46 and the scFv binds MICA/B. As for many of the embodiments herein, these constructs include skew variants, pI variants, ablation variants, additional Fc variants, etc. as desired and described herein.

[0631] The antibodies described herein provide 2 + 1 mAb-scFv formats, where the NKp46 domain sequences comprise variable heavy and variable light domains selected from the group including: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, and variants thereof (see, e.g., Figs. 23 and 24); and the MICA/B binding domain sequences comprise variable heavy and variable light domains selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5

[MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ

ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, and variants thereof (see, e.g., Figs. 21 and 22).

[0632] In particular embodiments, the αNKp46 V_H and V_L binding domain sequences are selected from the group including: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, or a variant thereof (see, e.g., Figs. 23 and 24).

[0633] In particular embodiments, the αMICA/B V_H/V_L pairs are selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for

D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID

Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, or a variant thereof (see, e.g., Figs. 21 and 22).

[0634] In some embodiments, the 2 + 1 mAb-scFv format includes one or more of: (a) Fc ADCC variants (see, e.g., Figs. 7 and 10), (b) skew variants (see, e.g., Figs. 4, 10, and 11), and/or pI variants (see, e.g., Figs. 4, 5, and 10). Accordingly, some embodiments include mAb-scFv formats that comprise: (i) a first monomer that comprises the Fc ADCC variants S239D/I332E, the skew variants S364K/E357Q, and a variable heavy domain that, with the variable light domain of the common light chain, makes up an Fv that binds to MICA/B as outlined herein, and a scFv domain that binds to NKp46, (ii) a second monomer that comprises the skew variants L368D/K370S, the pI variants N208D/Q295E/N384D/Q418E/N421D, and a variable heavy domain that, with the variable light domain of the common light chain, makes up an Fv that binds to MICA/B as outlined herein, and (iii) a common light chain comprising a variable light domain and a constant light domain. Further, bispecific antibodies in the 2 + 1 mAb-scFv format can also include one or more Fc domains with one or more ablation variants (see, e.g., Fig. 6). NKp46 binding domain sequences finding particular use in these embodiments include, but are not limited to: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, or variants thereof (see, e.g., Figs. 23 and 24). MICA/B binding domain sequences finding particular use in these embodiments include, but are not limited to: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and

XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and

XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, or variants thereof (see, e.g., Figs. 21 and 22).

[0635] In some embodiments, the 2 + 1 mAb-scFv format includes Fc ADCC variants (see, e.g., Figs. 7 and 10), skew variants (see, e.g., Figs. 4, 10, and 11), pI variants (see, e.g., Figs. 4, 5, and 10), and/or FcRn variants (see, e.g., Fig. 10). Accordingly, some embodiments include mAb-

scFv formats that comprise: (i) a first monomer that comprises the Fc ADCC variants S239D/I332E, the skew variants S364K/E357Q, the FcRn variants M428L/N434S, and a variable heavy domain that, with the variable light domain of the common light chain, makes up an Fv that binds to MICA/B as outlined herein, and a scFv domain that binds to NKp46, (ii) a second monomer that comprises the skew variants L368D/K370S, the pI variants N208D/Q295E/N384D/Q418E/N421D, the FcRn variants M428L/N434S, and a variable heavy domain that, with the variable light domain of the common light chain, makes up an Fv that binds to MICA/B as outlined herein, and (iii) a common light chain comprising a variable light domain and a constant light domain. Further, bispecific antibodies in the mAb-scFv format can also include one or more Fc domains with one or more ablation variants (see, e.g., Fig. 6). NKp46 binding domain sequences finding particular use in these embodiments include, but are not limited to: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, or variants thereof (see, e.g., Figs. 23 and 24). MICA/B binding domain sequences finding particular use in these embodiments include, but are not limited to: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID

Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos:

XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, or variants thereof (see, e.g., Figs. 21 and 22).

[0636] Figs. 16A-16G show some exemplary Fc domain sequences that are useful with the 2 + 1 mAb-scFv format. The "monomer 1" sequences depicted in Figs. Figs. 16A-16G typically refer to the Fc domain of the "Fab-Fc heavy chain," and the "monomer 2" sequences refer to the Fc domain of the "Fab-Fc-scFv heavy chain."

[0637] In some embodiments, one or both of the Fc domains comprising the heterodimeric Fc backbone pairs are configured such that one or both of the Fc domains have wildtype FcγR effector function. In some embodiments, the heterodimeric Fc backbone pairs have wildtype FcγR effector function, including, but not limited to, those pairs of: SEQ ID NOs: XXX and XXX, as shown in Fig. 16A.

[0638] In some embodiments, one or both of the Fc domains comprising the heterodimeric Fc

backbone pairs include amino acid substitutions such that one or both of the Fc domains have increased ADCC activity. In certain embodiments, the amino acid substitutions include one or more of: S239D, I332E, or S239D/I332E, or any of the Fc ADCC variants shown in Figs. 7 and 10. In some instances, only monomer 1 or monomer 2 of the heterodimeric Fc backbone pairs include amino acid substitutions resulting in increased ADCC activity. In such an instance, the pair of heterodimeric Fc backbones may be referred to as an asymmetric, ADCC-enhanced heterodimeric Fc backbone pair. In other instances, both monomers (i.e., monomer 1 and monomer 2) of the heterodimeric Fc backbone pairs independently include one or more amino acid substitutions conferring an increased ADCC activity. In such an instance, the pair of heterodimeric Fc backbones may be referred to as a symmetric, ADCC-enhanced heterodimeric Fc backbone pair. As used herein, the terms "asymmetric" and "symmetric" are not intended to mean that the heterodimeric Fc backbone pairs comprise identical mutations, but rather that only one Fc domain (in the case of asymmetric pairs) or both Fc domains (in the case of symmetric pairs) includes amino acid variants conferring an increase in ADCC activity. In some instances, monomer 1 and monomer 2 can contain identical amino acid substitutions (e.g., both monomers contain a S239D substitution, an I332E substitution, or both substitutions are present on both monomers). In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same (e.g., monomer 1 may contain the S239D/I332E substitutions, and monomer 2 contains the S239D substitution and is WT with respect to the 332 residue (or the reverse where monomer 2 is WT with respect to the 239 residue and contains the I332E substitution); monomer 2 may contain the S239D/I332E substitutions, and monomer 1 contains the S239D substitution and is WT with respect to the 332 residue (or the reverse where monomer 1 is WT with respect to the 239 residue and contains the I332E substitution); etc.). In still other instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer (e.g., S239D on monomer 1 and I332E on monomer 2, or the reverse). In some embodiments, the heterodimeric Fc backbone pairs have increased ADCC activity, including, but not limited to, those pairs of: SEQ ID NOs: XXX and XXX, as shown in Figs. 16A-16D.

[0639] In some embodiments, one or both of the Fc domains comprising the heterodimeric Fc backbone pairs include amino acid substitutions such that one or both of the Fc domains have improved serum half-life. In certain embodiments, the amino acid substitutions include one or more of: M428L, N434S, N434A, M428L/N434S, M252Y/S254T/T256E, or M428L/N434A. In

some instances, only monomer 1 or monomer 2 of the heterodimeric Fc backbone pairs include amino acid substitutions resulting in improved serum half-life. In such an instance, the pair of heterodimeric Fc backbones may be referred to as an asymmetric, Xtend heterodimeric Fc backbone pair. In other instances, both monomers (i.e., monomer 1 and monomer 2) of the heterodimeric Fc backbone pairs independently include one or more amino acid substitutions conferring an increase serum half-life. In such an instance, the pair of heterodimeric Fc backbones may be referred to as a symmetric, Xtend heterodimeric Fc backbone pair. As used herein, the terms "asymmetric" and "symmetric" are not intended to mean that the heterodimeric Fc backbone pairs comprise identical mutations, but rather that only one Fc domain (in the case of asymmetric pairs) or both Fc domains (in the case of symmetric pairs) contains amino acid variants conferring an increased serum half-life. In some instances, monomer 1 and monomer 2 can contain identical amino acid substitutions. In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same (e.g., both monomers contain the M428L substitution, one monomer further contains the N434S substitution, and the other monomer contains the N434A mutation). In some instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer (e.g., N434S on one monomer, and N434A on the other monomer).

[0640] In some embodiments, one or both of the Fc domains comprising the heterodimeric Fc backbone pairs include amino acid substitutions such that one or both of the Fc domains have increased ADCC activity and improved serum half-life. In certain embodiments, the amino acid substitutions include: (i) one or more of amino acid substitutions selected from the group including: S239D, I332E, and S239D/I332E, or any of the Fc ADCC variants shown in Figs. 7 and 10, and (ii) one or more amino acid substitutions selected from the group including: M428L, N434S, N434A, M428L/N434S, M252Y/S254T/T256E, and M428L/N434A. In some instances, only monomer 1 or monomer 2 of the heterodimeric Fc backbone pairs include amino acid substitutions resulting in increased ADCC and increased serum half-life. In such an instance, the pair of heterodimeric Fc backbones may be referred to as an asymmetric, ADCC-enhanced heterodimeric Fc backbone pair with Xtend. In other instances, both monomers (i.e., monomer 1 and monomer 2) of the heterodimeric Fc backbone pairs independently comprise amino acid substitutions resulting in increased ADCC and increased serum half-life. In such an instance, the pair of heterodimeric Fc backbones may be referred to as a symmetric, ADCC-enhanced

heterodimeric Fc backbone pair with Xtend. As used herein, the terms "asymmetric" and "symmetric" are not intended to mean that the heterodimeric Fc backbone pairs comprise identical mutations, but rather that only one Fc domain (in the case of asymmetric pairs) or both Fc domains (in the case of symmetric pairs) contains amino acid variants conferring an increase in ADCC activity and improved serum half-life. In some instances, monomer 1 and monomer 2 can contain identical amino acid substitutions. In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same. In still other instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer. In some embodiments, the heterodimeric Fc backbone pairs have increased ADCC activity and increased serum-half-life, including, but not limited to, those pairs of: SEQ ID NOs: XXX and XXX, as shown in Figs. 16D-16G.

[0641] In some embodiments, one or both of the Fc domains comprising the heterodimeric Fc backbone pairs include amino acid substitutions such that one or both of the Fc domains have an ablated FcγR function. Nonlimiting examples of amino acid substitutions (and combinations thereof) conferring an ablated FcγR function are shown in, for example, Fig. 6. In some instances, only monomer 1 or monomer 2 of the heterodimeric Fc backbone pairs include amino acid substitutions that result in an ablated FcγR function (see, e.g., Fig. 6). In such an instance, the pair of heterodimeric Fc backbones may be referred to as an asymmetric, FcKO heterodimeric Fc backbone pair. In other instances, both monomers (i.e., monomer 1 and monomer 2) of the heterodimeric Fc backbone pairs independently comprise one or more amino acid substitutions resulting in an ablated FcγR function (see, e.g., Fig. 6). In such an instance, the pair of heterodimeric Fc backbones may be referred to as a symmetric, FcKO heterodimeric Fc backbone pair. As used herein, the terms "asymmetric" and "symmetric" are not intended to mean that the heterodimeric Fc backbone pairs comprise identical mutations, but rather that only one Fc domain (in the case of asymmetric pairs) or both Fc domains (in the case of symmetric pairs) contains amino acid variants resulting in an ablated FcγR function. In some embodiments, the heterodimeric Fc backbone pairs include amino acid substitutions such that the Fc domains have an ablated FcγR effector function, including, but not limited to, those pairs of: SEQ ID NOs: XXX and XXX, as shown in Fig. 16A.

[0642] Exemplary anti-NKp46 × anti-MICA/B 2 + 1 mAb-scFv format antibodies are depicted

in Fig. 35. In some embodiments, such bispecific antibodies include, but are not limited to: XENP47446 and XENP47447, as are shown in Fig. 35. In some embodiments, the anti-NKp46 × anti-MICA/B bispecific antibody is in a 2 + 1 mAb-scFv format, and the bispecific antibody comprises: (i) a first monomer, (ii) a second monomer, and (iii) a light chain. In an exemplary embodiment, the first monomer comprises SEQ ID NO: XXX, the second monomer comprises SEQ ID NO: XXX, and the light chain comprises SEQ ID NO: XXX; see, e.g., Fig. 35.

4. 1 + 1 Empty × Fab-scFv Format

[0643] One heterodimeric scaffold that finds particular use in the antibodies described herein is the "1 + 1 Empty × Fab-scFv" format (also referred to herein as the "one-armed central-scFv" format), as is shown in Fig. 25B. In this embodiment, one monomer comprises just an Fc domain (i.e., a first Fc domain), while the other monomer includes a Fab domain (a first ABD), a scFv (a second ABD), and an Fc domain (i.e., a second Fc domain), where the scFv domain is inserted between the first Fc domain and the second Fc domain. In this format, the Fab portion binds one receptor target and the scFv binds another. In this format, either the Fab portion binds a MICA/B antigen and the scFv binds a NKp46 antigen, or vice versa.

[0644] In this embodiment, one monomer comprises a first heavy chain comprising a first variable heavy domain, a CH1 domain, and a Fc domain, with a scFv comprising a scFv variable light domain, an scFv linker, and a scFv variable heavy domain. The scFv is covalently attached between the C-terminus of the CH1 domain of the heavy constant domain and the N-terminus of the first Fc domain using domain linkers, in either orientation, VH1-CH1-[optional domain linker]-VH2-scFv linker-VL2-[optional domain linker]-CH2-CH3 or VH1-CH1-[optional domain linker]-VL2-scFv linker-VH2-[optional domain linker]-CH2-CH3. The second monomer comprises an Fc domain (CH2-CH3). This embodiment further utilizes a light chain comprising a variable light domain and a constant light domain that associates with the heavy chain to form a Fab. As for many of the embodiments herein, these constructs can include one or more of: (i) Fc ADCC variants, (ii) pI variants, (iii) ablation variants, (iv) skew variants, (v) variants that improve serum half-life, as well as any combination thereof, as desired and described herein.

[0645] Any suitable NKp46 antigen binding domain (as described herein and in the Figures, or a variant thereof) can be included in the subject one-armed central-scFv format antibody.

[0646] Any suitable MICA/B antigen binding domain (as described herein and in the Figures, or

a variant thereof) can be included in the subject one-armed central-scFv format antibody.

[0647] In addition, the Fc domains of the 1 + 1 Empty × Fab-scFv format can comprise Fc ADCC variants (including, but not limited to, those shown in Figs. 7 and 10), skew variants (e.g., a set of amino acid substitutions as shown in Figs. 4, 10, and 11, with particularly useful skew variants being selected from the group including: (i) S364K/E357Q:L368D/K370S, (ii) L368D/K370S:S364K, (iii) L368E/K370S:S364K, (iv) T411T/E360E/Q362E:D401K, (v) L368D/K370S:S364K/E357L, (vi) K370S:S364K/E357Q, (vii) T366S/L368A/Y407V:T366W, and (viii) T366S/L368A/Y407V/Y349C:T366W/S354C), optionally ablation variants (including those shown in Fig. 6), optionally charged scFv linkers (including those shown in Fig. 8; see, e.g., SEQ ID NOs: XXX-XXX), and the heavy chain can comprise pI variants (including those shown in Fig. 4, 5, and 10).

[0648] Exemplary anti-NKp46 × anti-MICA/B 1 + 1 Empty × Fab-scFv format antibodies are depicted in Fig. 32. In some embodiments, such bispecific antibodies include, but are not limited to: XENP47274 and XENP47281, as are shown in Fig. 32. In some embodiments, the anti-NKp46 × anti-MICA/B bispecific antibody is in a 1 + 1 Empty × Fab-scFv format, and the bispecific antibody comprises: (i) a first monomer, (ii) a second monomer, and (iii) a light chain. In an exemplary embodiment, the first monomer comprises SEQ ID NO: XXX, the second monomer comprises SEQ ID NO: XXX, and the light chain comprises SEQ ID NO: XXX; see, e.g., Fig. 32.

5. 2 + 1 Fab2 × scFv Format

[0649] One heterodimeric scaffold that finds particular use in the antibodies described herein is the "2 + 1 Fab2 × scFv" format (also referred to herein as the "2 + 1 stack Fab_2-scFv-Fc" or "stack Fab_2-scFv-Fc" format), as is shown in Fig. 25D. In this embodiment, the format relies on the use of a "stacked" Fab portion that binds a first target antigen (e.g., a MICA/B antigen), and an scFv domain that binds a second target antigen (e.g., a NKp46 antigen); or the reverse, wherein the first target antigen is a NKp46 antigen, and the second target antigen is a MICA/B antigen. In this format, the first monomer comprises, from N-terminus to C-terminus, a first heavy chain (comprising a variable heavy domain and a constant domain), a domain linker, and a second heavy chain (comprising a variable heavy domain and a constant domain), and a first Fc domain; the second monomer comprises, from N-terminus to C-terminus, a scFv comprising a

scFv variable light domain, an scFv linker, and a scFv variable heavy domain in either orientation ((VH1-CH1-hinge-CH2-CH3-[optional linker]-VH2-scFv linker-VL2) or (VH1-CH1-hinge-CH2-CH3-[optional linker]-VL2-scFv linker-VH2)), and a second Fc domain; and the third monomer comprises a common light chain including a variable light domain and a constant light domain, that associates with the heavy chains to form two identical Fabs that bind a MICA/B antigen (or, in other embodiments, a NKp46 antigen). As for many of the embodiments herein, these constructs can include one or more of: (i) Fc ADCC variants, (ii) pI variants, (iii) ablation variants, (iv) skew variants, (v) variants that improve serum half-life, as well as any combination thereof, as desired and described herein.

[0650] Any suitable NKp46 antigen binding domain (as described herein and in the Figures, or a variant thereof) can be included in the subject 2 + 1 Fab2 × scFv format antibody.

[0651] Any suitable MICA/B antigen binding domain (as described herein and in the Figures, or a variant thereof) can be included in the subject 2 + 1 Fab2 × scFv format antibody.

[0652] In addition, the Fc domains of the 2 + 1 Fab2 × scFv format can comprise Fc ADCC variants (including, but not limited to, those shown in Figs. 7 and 10), skew variants (e.g., a set of amino acid substitutions as shown in Figs. 4, 10, and 11, with particularly useful skew variants being selected from the group including: (i) S364K/E357Q:L368D/K370S, (ii) L368D/K370S:S364K, (iii) L368E/K370S:S364K, (iv) T411T/E360E/Q362E:D401K, (v) L368D/K370S:S364K/E357L, (vi) K370S:S364K/E357Q, (vii) T366S/L368A/Y407V:T366W, and (viii) T366S/L368A/Y407V/Y349C:T366W/S354C), optionally ablation variants (including those shown in Fig. 6), optionally charged scFv linkers (including those shown in Fig. 8; see, e.g., SEQ ID NOs: XXX-XXX), and the heavy chain can comprise pI variants (including those shown in Fig. 4, 5, and 10).

[0653] Exemplary anti-NKp46 × anti-MICA/B 2 + 1 Fab2 × scFv format antibodies are depicted in Fig. 34. In some embodiments, such bispecific antibodies include, but are not limited to: XENP47442 and XENP47443, as are shown in Fig. 34. In some embodiments, the anti-NKp46 × anti-MICA/B bispecific antibody is in a 2 + 1 Fab2 × scFv format, and the bispecific antibody comprises: (i) a first monomer, (ii) a second monomer, and (iii) a light chain. In an exemplary embodiment, the first monomer comprises SEQ ID NO: XXX, the second monomer comprises SEQ ID NO: XXX, and the light chain comprises SEQ ID NO: XXX; see, e.g., Fig. 34.

6. 1 + 1 CLC Format

[0654] One heterodimeric scaffold that finds particular use in the antibodies described herein is the "1 + 1 common light chain" (or "1 + 1 CLC") format. The 1 + 1 CLC format antibody includes: a first monomer that includes a VH1-CH1-hinge-CH2-CH3, wherein VH1 is a first variable heavy domain and CH2-CH3 is a first Fc domain; a second monomer that includes a VH2-CH1-hinge-CH2-CH3, wherein VH2 is a second variable heavy domain and CH2-CH3 is a second Fc domain; and a third monomer "common light chain" comprising V_L-C_L, wherein V_L is a common variable light domain and C_L is a constant light domain. In such embodiments, the V_L pairs with the VH1 to form a first binding domain with a first antigen binding specificity; and the V_L pairs with the VH2 to form a second binding domain with a second antigen binding specificity. In some embodiments, the 1 + 1 CLC format antibody is a bivalent antibody.

[0655] In some embodiments, the first and/or second Fc domains of the 1 + 1 CLC format are variant Fc domains. Generally, variant Fc domains can comprise one or more of: (a) one or more Fc ADCC variants (see, e.g., Figs. 7 and 10), (b) one or more skew variants (see, e.g., Figs. 4, 10, and 11), (c) one or more ablation variants (see, e.g., Fig. 6), (d) one or more FcRn variants (e.g., M428L, N434S, N434A, M428L/N434S, M428L/N434A, etc.), (e) a scFv linker (including those shown in Fig. 8; see, e.g., SEQ ID NOs: XXX-XXX), and one or both of the heavy chains can comprise one or more pI variants (see, e.g., Figs. 4, 5, and 10). The various types of variants can be used alone, or in combination with other variant types described herein.

[0656] In some embodiments, one or both of the Fc domains are configured such that one or both of the Fc domains have wildtype FcγR effector function. In some embodiments, the heterodimeric Fc backbone pairs have wildtype FcγR effector function, including, but not limited to, those pairs of Fc backbones shown in the Figures.

[0657] In some embodiments, one or both of the Fc domains include one or more amino acid substitutions such that one or both of the Fc domains have increased ADCC activity. In certain embodiments, the amino acid substitutions include one or more of: S239D, I332E, or S239D/I332E, or any of the Fc ADCC variants shown in Figs. 7 and 10. In some instances, the Fc backbone pair comprises an asymmetric, ADCC-enhanced heterodimeric Fc backbone pair (as described above). In other embodiments, the Fc backbone pair comprises a symmetric, ADCC-enhanced heterodimeric Fc backbone pair (as described above). In some instances,

monomer 1 and monomer 2 (of the heterodimeric Fc backbone pair) can contain identical amino acid substitutions. In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same. In still other instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer. In some embodiments, the heterodimeric Fc backbone pairs have increased ADCC activity, including, but not limited to, those pairs of Fc backbones shown in the Figures. In some embodiments, one or both of the Fc domains include one or more amino acid substitutions such that one or both of the Fc domains have increased ADCC activity, and optionally one or more of: (i) one or more skew variants, (ii) one or more ablation variants, (iii) one or more variants that improve serum half-life, (iv) one or more pI variants in the constant domain of the first and/or second monomer, or (v) any combination thereof.

[0658] In some embodiments, one or both of the Fc domains include heterodimerization skew variants (e.g., a set of amino acid substitutions, including, but not limited to, those shown in Figs. 4, 10, and 11). Particularly useful heterodimerization skew variants include, but are not limited to: (i) S364K/E357Q : L368D/K370S, (ii) L368D/K370S : S364K, (iii) L368E/K370S : S364K, (iv) T411T/K360E/Q362E : D401K, (v) L368D/K370S : S364K/E357L, (vi) K370S : S364K/E357Q, (vii) T366S/L368A/Y407V : T366W, and (viii) T366S/L368A/Y407V/Y349C : T366W/S354C (according to EU numbering). In exemplary embodiments, one of the first or second variant Fc domains includes the heterodimerization skew variants L368D/K370S, and the other of the second or first variant Fc domain includes heterodimerization skew variants S364K/E357Q, wherein numbering is according to EU numbering. In some instances, the heterodimerization skew variants are only included on one of the two Fc domains. In such instances, the heterodimerization skew variants are in an asymmetric configuration. In some other instances, the heterodimerization skew variants are included on both of the Fc domains. In such instances, the heterodimerization skew variants are in a symmetric configuration. As used herein, the terms “asymmetric configuration” and “symmetric configuration” are not intended to mean that the heterodimeric Fc backbone pairs comprise identical heterodimerization skew variants, but rather that only one Fc domain (in the case of asymmetric configurations) or both Fc domains (in the case of symmetric configurations) includes heterodimerization skew variants. In some instances, monomer 1 and monomer 2 (of the heterodimeric Fc backbone pair) can contain identical amino acid substitutions. In other instances, monomer 1 and monomer 2 can

contain at least one amino acid substitution that is the same. In still other instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer. In some embodiments, one or both of the Fc domains include heterodimerization skew variants, and optionally one or more of: (i) one or more Fc ADCC variants, (ii) one or more ablation variants, (iii) one or more variants that improve serum half-life, (iv) one or more pI variants in the constant domain of the first and/or second monomer, or (v) any combination thereof.

[0659] In some embodiments, one or both of the Fc domains include one or more amino acid substitutions such that one or both of the Fc domains have improved serum half-life. In certain embodiments, the amino acid substitutions include one or more of: M428L, N434S, N434A, M428L/N434S, M252Y/S254T/T256E, or M428L/N434A. In some instances, the Fc backbone pair comprises an asymmetric, Xtend heterodimeric Fc backbone pair (as described above). In other embodiments, the Fc backbone pair comprises a symmetric, Xtend heterodimeric Fc backbone pair (as described above). In some instances, monomer 1 and monomer 2 (of the heterodimeric Fc backbone pair) can contain identical amino acid substitutions. In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same. In still other instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer. In some embodiments, the heterodimeric Fc backbone pairs have increased serum half-life, including, but not limited to, those pairs of Fc backbones shown in the Figures. In some embodiments, one or both of the Fc domains include one or more amino acid substitutions such that one or both of the Fc domains have improved serum half-life, and optionally one or more of: (i) one or more skew variants, (ii) one or more ablation variants, (iii) one or more Fc ADCC variants, (iv) one or more pI variants in the constant domain of the first and/or second monomer, or (v) any combination thereof.

[0660] In some embodiments, one or both of the Fc domains include one or more amino acid substitutions such that one or both of the Fc domains have an ablated FcγR function. Nonlimiting examples of amino acid substitutions (and combinations thereof) conferring an ablated FcγR function are shown in, for example, Fig. 6. In some instances, the Fc backbone pair comprises an asymmetric FcKO heterodimeric Fc backbone pair (as described above). In other embodiments, the Fc backbone pair comprises a symmetric, FcKO heterodimeric Fc backbone pair (as described above). In some instances, monomer 1 and monomer 2 (of the heterodimeric Fc

backbone pair) can contain identical amino acid substitutions. In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same. In still other instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer. In some embodiments, the heterodimeric Fc backbone pairs have ablated FcγR function, including, but not limited to, those pairs of Fc backbones shown in the Figures. In some embodiments, each of the first and second Fc domains include the ablation variants E233P/L234V/L235A/G236_/S267K, wherein numbering is according to EU numbering. In some embodiments, one or both of the Fc domains include one or more amino acid substitutions such that one or both of the Fc domains have an ablated FcγR function, and optionally one or more of: (i) one or more skew variants, (ii) one or more Fc ADCC variants, (iii) one or more variants that improve serum half-life, (iv) one or more pI variants in the constant domain of the first and/or second monomer, or (v) any combination thereof.

[0661] In some embodiments, the constant domain (CH1-hinge-CH2-CH3) of the first and/or second monomer includes pI variants (including, but not limited to, those shown in Figs. 4, 5, and 10). In exemplary embodiments, the constant domain (CH1-hinge-CH2-CH3) of the first or second monomer includes pI variants N208D/Q295E/N384D/Q418E/N421D, wherein numbering is according to EU numbering. In some embodiments, the constant domain of the first and/or second monomer includes pI variants (including, but not limited to, those shown in Figs. 4, 5, and 10), and the first and/or second Fc domain optionally contains one or more of: (i) one or more skew variants, (ii) one or more ablation variants, (iii) one or more variants that improve serum half-life, (iv) one or more Fc ADCC variants, or (v) any combination thereof.

[0662] In some embodiments, one of the first or second antigen binding domains is a NKp46 antigen binding domain. Any suitable NKp46 antigen binding domain (as described herein and in the Figures, or a variant thereof) can be included in the subject 1 + 1 CLC format antibody.

[0663] In some embodiments, one of the first or second antigen binding domains is a MICA/B antigen binding domain. Any suitable MICA/B antigen binding domain (as described herein and in the Figures, or a variant thereof) can be included in the subject 1 + 1 CLC format antibody.

7. 2 + 1 CLC Format

[0664] One heterodimeric scaffold that finds particular use in the antibodies described herein is the "2 + 1 common light chain" (or ("2 + 1 CLC") format. The 2 + 1 CLC format includes: a first

monomer that includes a VH1-CH1-linker-VH1-CH1-hinge-CH2-CH3, wherein the first and second VH1 are each a first variable heavy domain and CH2-CH3 is a first Fc domain; a second monomer that includes a VH2-CH1-hinge-CH2-CH3, wherein VH2 is a second variable heavy domain and CH2-CH3 is a second Fc domain; and a third monomer that includes a "common light chain" V_L-C_L, wherein V_L is a common variable light domain and C_L is a constant light domain. The V_L pairs with each of the VH1s of the first monomer to form two first binding domains, each with a first antigen binding specificity; and the V_L pairs with the VH2 to form a second binding domain with a second antigen binding specificity. The linker of the first monomer can be any suitable linker, including, but not limited to, any one of the domain linkers described in Fig. 9 (see, e.g., SEQ ID NOs: XXX-XXX). In some embodiments, the linker is EPKSCGKPGSGKPGS (SEQ ID NO: XXX). In some embodiments, the 2 + 1 CLC format antibody is a trivalent antibody.

[0665] In some embodiments, the first and/or second Fc domains of the 2 + 1 CLC format are variant Fc domains. Generally, variant Fc domains can comprise one or more of: (a) one or more Fc ADCC variants (see, e.g., Figs. 7 and 10), (b) one or more skew variants (see, e.g., Figs. 4, 10, and 11), (c) one or more ablation variants (see, e.g., Fig. 6), (d) one or more FcRn variants (e.g., M428L, N434S, N434A, M428L/N434S, M428L/N434A, etc.), (e) a scFv linker (including those shown in Fig. 8; see, e.g., SEQ ID NOs: XXX-XXX), and one or both of the heavy chains can comprise one or more pI variants (see, e.g., Figs. 4, 5, and 10). The various types of variants can be used alone, or in combination with other variant types described herein.

[0666] In some embodiments, one or both of the Fc domains are configured such that one or both of the Fc domains have wildtype FcγR effector function. In some embodiments, the heterodimeric Fc backbone pairs have wildtype FcγR effector function, including, but not limited to, those pairs of Fc backbones shown in the Figures.

[0667] In some embodiments, one or both of the Fc domains include one or more amino acid substitutions such that one or both of the Fc domains have increased ADCC activity. In certain embodiments, the amino acid substitutions include one or more of: S239D, I332E, or S239D/I332E, or any of the Fc ADCC variants shown in Figs. 7 and 10. In some instances, the Fc backbone pair comprises an asymmetric, ADCC-enhanced heterodimeric Fc backbone pair (as described above). In other embodiments, the Fc backbone pair comprises a symmetric,

ADCC-enhanced heterodimeric Fc backbone pair (as described above). In some instances, monomer 1 and monomer 2 (of the heterodimeric Fc backbone pair) can contain identical amino acid substitutions. In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same. In still other instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer. In some embodiments, the heterodimeric Fc backbone pairs have increased ADCC activity, including, but not limited to, those pairs of Fc backbones shown in the Figures. In some embodiments, one or both of the Fc domains include one or more amino acid substitutions such that one or both of the Fc domains have increased ADCC activity, and optionally one or more of: (i) one or more skew variants, (ii) one or more ablation variants, (iii) one or more variants that improve serum half-life, (iv) one or more pI variants in the constant domain of the first and/or second monomer, or (v) any combination thereof.

[0668] In some embodiments, one or both of the Fc domains include heterodimerization skew variants (e.g., a set of amino acid substitutions, including, but not limited to, those shown in Figs. 4, 10, and 11). Particularly useful heterodimerization skew variants include, but are not limited to: (i) S364K/E357Q : L368D/K370S, (ii) L368D/K370S : S364K, (iii) L368E/K370S : S364K, (iv) T411T/K360E/Q362E : D401K, (v) L368D/K370S : S364K/E357L, (vi) K370S : S364K/E357Q, (vii) T366S/L368A/Y407V : T366W, and (viii) T366S/L368A/Y407V/Y349C : T366W/S354C (according to EU numbering). In exemplary embodiments, one of the first or second variant Fc domains includes the heterodimerization skew variants L368D/K370S, and the other of the second or first variant Fc domain includes heterodimerization skew variants S364K/E357Q, wherein numbering is according to EU numbering. In some instances, the heterodimerization skew variants are in an asymmetric configuration, as described above. In other embodiments, the heterodimerization skew variants are in a symmetric configuration, as described above. In some instances, monomer 1 and monomer 2 (of the heterodimeric Fc backbone pair) can contain identical amino acid substitutions. In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same. In still other instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer. In some embodiments, one or both of the Fc domains include heterodimerization skew variants, and optionally one or more of: (i) one or more Fc ADCC variants, (ii) one or more ablation variants, (iii) one or more variants that improve serum half-life, (iv) one or more pI

variants in the constant domain of the first and/or second monomer, or (v) any combination thereof.

[0669] In some embodiments, one or both of the Fc domains include one or more amino acid substitutions such that one or both of the Fc domains have improved serum half-life. In certain embodiments, the amino acid substitutions include one or more of: M428L, N434S, N434A, M428L/N434S, M252Y/S254T/T256E, or M428L/N434A. In some instances, the Fc backbone pair comprises an asymmetric, Xtend heterodimeric Fc backbone pair (as described above). In other embodiments, the Fc backbone pair comprises a symmetric, Xtend heterodimeric Fc backbone pair (as described above). In some instances, monomer 1 and monomer 2 (of the heterodimeric Fc backbone pair) can contain identical amino acid substitutions. In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same. In still other instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer. In some embodiments, the heterodimeric Fc backbone pairs have increased serum half-life, including, but not limited to, those pairs of Fc backbones shown in the Figures. In some embodiments, one or both of the Fc domains include one or more amino acid substitutions such that one or both of the Fc domains have improved serum half-life, and optionally one or more of: (i) one or more skew variants, (ii) one or more ablation variants, (iii) one or more Fc ADCC variants, (iv) one or more pI variants in the constant domain of the first and/or second monomer, or (v) any combination thereof.

[0670] In some embodiments, one or both of the Fc domains include one or more amino acid substitutions such that one or both of the Fc domains have an ablated FcγR function. Nonlimiting examples of amino acid substitutions (and combinations thereof) conferring an ablated FcγR function are shown in, for example, Fig. 6. In some instances, the Fc backbone pair comprises an asymmetric FcKO heterodimeric Fc backbone pair (as described above). In other embodiments, the Fc backbone pair comprises a symmetric, FcKO heterodimeric Fc backbone pair (as described above). In some instances, monomer 1 and monomer 2 (of the heterodimeric Fc backbone pair) can contain identical amino acid substitutions. In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same. In still other instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer. In some embodiments, the heterodimeric Fc backbone pairs have ablated FcγR

function, including, but not limited to, those pairs of Fc backbones shown in the Figures. In some embodiments, each of the first and second Fc domains include the ablation variants E233P/L234V/L235A/G236_/S267K, wherein numbering is according to EU numbering. In some embodiments, one or both of the Fc domains include one or more amino acid substitutions such that one or both of the Fc domains have an ablated FcγR function, and optionally one or more of: (i) one or more skew variants, (ii) one or more Fc ADCC variants, (iii) one or more variants that improve serum half-life, (iv) one or more pI variants in the constant domain of the first and/or second monomer, or (v) any combination thereof.

[0671] In some embodiments, the constant domain (CH1-hinge-CH2-CH3) of the first and/or second monomer includes pI variants (including, but not limited to, those shown in Figs. 4, 5, and 10). In exemplary embodiments, the constant domain (CH1-hinge-CH2-CH3) of the first or second monomer includes pI variants N208D/Q295E/N384D/Q418E/N421D, wherein numbering is according to EU numbering. In some embodiments, the constant domain of the first and/or second monomer includes pI variants (including, but not limited to, those shown in Figs. 4, 5, and 10), and the first and/or second Fc domain optionally contains one or more of: (i) one or more skew variants, (ii) one or more ablation variants, (iii) one or more variants that improve serum half-life, (iv) one or more Fc ADCC variants, or (v) any combination thereof.

[0672] In some embodiments, each of the first antigen binding domains or the second antigen binding domain is a NKp46 antigen binding domain. Any suitable NKp46 antigen binding domain (as described herein and in the Figures, or a variant thereof) can be included in the subject 2 + 1 CLC format antibody.

[0673] In some embodiments, each of the first antigen binding domains or the second antigen binding domain is a MICA/B antigen binding domain. Any suitable MICA/B antigen binding domain (as described herein and in the Figures, or a variant thereof) can be included in the subject 2 + 1 CLC format antibody.

8. <u>mAb-Fv Format</u>

[0674] One heterodimeric scaffold that finds particular use in the antibodies described herein is the "mAb-Fv" format. In this embodiment, the format relies on the use of a C-terminal attachment of an "extra" variable heavy domain to one monomer and the C-terminal attachment of an "extra" variable light domain to the other monomer, thus forming a third ABD (i.e., an

"extra" Fv domain), wherein the Fab portions of the two monomers bind a MICA/B antigen and the "extra" scFv domain binds a NKp46. Alternatively, the Fab portions of the two monomers can bind a NKp46 antigen and the "extra" scFv domain can bind MICA/B.

[0675] In this embodiment, the first monomer comprises: a first heavy chain, comprising a first variable heavy domain and a first constant heavy domain comprising a first Fc domain, with a first variable light domain covalently attached to the C-terminus of the first Fc domain using a domain linker (VH1-CH1-hinge-CH2-CH3-[optional linker]-VL2). The second monomer comprises: a second variable heavy domain, a second constant heavy domain comprising a second Fc domain, and a third variable heavy domain covalently attached to the C-terminus of the second Fc domain using a domain linker (VH1-CH1-hinge-CH2-CH3-[optional linker]-VH2). This embodiment further utilizes a common light chain comprising a variable light domain and a constant light domain, which associates with the heavy chains to form two identical Fabs that include two identical Fvs. The two C-terminally attached variable domains (VL2 and VH2) make up the "extra" third Fv. As for many of the embodiments herein, these constructs can include one or more of: (i) Fc ADCC variants, (ii) pI variants, (iii) ablation variants, (iv) skew variants, (v) variants that improve serum half-life, as well as any combination thereof, as desired and described herein.

[0676] Any suitable NKp46 antigen binding domain (as described herein and in the Figures, or a variant thereof) can be included in the subject mAb-Fv format antibody.

[0677] Any suitable MICA/B antigen binding domain (as described herein and in the Figures, or a variant thereof) can be included in the subject mAb-Fv format antibody.

9. Dual scFv Format

[0678] The antibodies described herein also provide dual scFv formats as are known in the art. In this embodiment, the anti-NKp46 × anti-MICA/B heterodimeric bispecific antibody is made up of two scFv-Fc monomers (both in either the V_H-scFv linker-V_L-[optional domain linker]-CH2-CH3 format, the V_L-scFv linker-V_H-[optional domain linker]-CH2-CH3 format, or with one monomer in one orientation and the other monomer in the other orientation).

[0679] In this case, all ABDs are in the scFv format. Any suitable NKp46 ABD and MICA/B ABD can be included in the subject bispecific antibodies in the dual scFv format, including any

of the NKp46 ABDs and MICA/B ABDs described herein, and in the Figures, as well as variants thereof.

[0680] In some embodiments, the first and/or second Fc domains of the dual scFv format are variant Fc domains. Generally, variant Fc domains can comprise one or more of: (a) one or more Fc ADCC variants (see, e.g., Figs. 7 and 10), (b) one or more skew variants (see, e.g., Figs. 4, 10, and 11), (c) one or more ablation variants (see, e.g., Fig. 6), (d) one or more FcRn variants (e.g., M428L, N434S, N434A, M428L/N434S, M428L/N434A, etc.), (e) a scFv linker (including those shown in Fig. 8; see, e.g., SEQ ID NOs: XXX-XXX), and one or both of the heavy chains can comprise one or more pI variants (see, e.g., Figs. 4, 5, and 10). The various types of variants can be used alone, or in combination with other variant types described herein.

[0681] In some embodiments, one or both of the Fc domains are configured such that one or both of the Fc domains have wildtype FcγR effector function. In some embodiments, the heterodimeric Fc backbone pairs have wildtype FcγR effector function, including, but not limited to, those pairs of Fc backbones shown in the Figures.

[0682] In some embodiments, one or both of the Fc domains include one or more amino acid substitutions such that one or both of the Fc domains have increased ADCC activity. In certain embodiments, the amino acid substitutions include one or more of: S239D, I332E, or S239D/I332E, or any of the Fc ADCC variants shown in Figs. 7 and 10. In some instances, the Fc backbone pair comprises an asymmetric, ADCC-enhanced heterodimeric Fc backbone pair (as described above). In other embodiments, the Fc backbone pair comprises a symmetric, ADCC-enhanced heterodimeric Fc backbone pair (as described above). In some instances, monomer 1 and monomer 2 (of the heterodimeric Fc backbone pair) can contain identical amino acid substitutions. In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same. In still other instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer. In some embodiments, the heterodimeric Fc backbone pairs have increased ADCC activity, including, but not limited to, those pairs of Fc backbones shown in the Figures. In some embodiments, one or both of the Fc domains include one or more amino acid substitutions such that one or both of the Fc domains have increased ADCC activity, and optionally one or more of: (i) one or more skew variants, (ii) one or more ablation variants, (iii) one or more variants that improve serum half-life, (iv) one or

more pI variants in the constant domain of the first and/or second monomer, or (v) any combination thereof.

[0683] In some embodiments, one or both of the Fc domains include heterodimerization skew variants (e.g., a set of amino acid substitutions, including, but not limited to, those shown in Figs. 4, 10, and 11). Particularly useful heterodimerization skew variants include, but are not limited to: (i) S364K/E357Q : L368D/K370S, (ii) L368D/K370S : S364K, (iii) L368E/K370S : S364K, (iv) T411T/K360E/Q362E : D401K, (v) L368D/K370S : S364K/E357L, (vi) K370S : S364K/E357Q, (vii) T366S/L368A/Y407V : T366W, and (viii) T366S/L368A/Y407V/Y349C : T366W/S354C (according to EU numbering). In exemplary embodiments, one of the first or second variant Fc domains includes the heterodimerization skew variants L368D/K370S, and the other of the second or first variant Fc domain includes heterodimerization skew variants S364K/E357Q, wherein numbering is according to EU numbering. In some instances, the heterodimerization skew variants are in an asymmetric configuration, as described above. In other embodiments, the heterodimerization skew variants are in a symmetric configuration, as described above. In some instances, monomer 1 and monomer 2 (of the heterodimeric Fc backbone pair) can contain identical amino acid substitutions. In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same. In still other instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer. In some embodiments, one or both of the Fc domains include heterodimerization skew variants, and optionally one or more of: (i) one or more Fc ADCC variants, (ii) one or more ablation variants, (iii) one or more variants that improve serum half-life, (iv) one or more pI variants in the constant domain of the first and/or second monomer, or (v) any combination thereof.

[0684] In some embodiments, one or both of the Fc domains include one or more amino acid substitutions such that one or both of the Fc domains have improved serum half-life. In certain embodiments, the amino acid substitutions include one or more of: M428L, N434S, N434A, M428L/N434S, M252Y/S254T/T256E, or M428L/N434A. In some instances, the Fc backbone pair comprises an asymmetric, Xtend heterodimeric Fc backbone pair (as described above). In other embodiments, the Fc backbone pair comprises a symmetric, Xtend heterodimeric Fc backbone pair (as described above). In some instances, monomer 1 and monomer 2 (of the

heterodimeric Fc backbone pair) can contain identical amino acid substitutions. In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same. In still other instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer. In some embodiments, the heterodimeric Fc backbone pairs have increased serum half-life, including, but not limited to, those pairs of Fc backbones shown in the Figures. In some embodiments, one or both of the Fc domains include one or more amino acid substitutions such that one or both of the Fc domains have improved serum half-life, and optionally one or more of: (i) one or more skew variants, (ii) one or more ablation variants, (iii) one or more Fc ADCC variants, (iv) one or more pI variants in the constant domain of the first and/or second monomer, or (v) any combination thereof.

[0685] In some embodiments, one or both of the Fc domains include one or more amino acid substitutions such that one or both of the Fc domains have an ablated FcγR function. Nonlimiting examples of amino acid substitutions (and combinations thereof) conferring an ablated FcγR function are shown in, for example, Fig. 6. In some instances, the Fc backbone pair comprises an asymmetric FcKO heterodimeric Fc backbone pair (as described above). In other embodiments, the Fc backbone pair comprises a symmetric, FcKO heterodimeric Fc backbone pair (as described above). In some instances, monomer 1 and monomer 2 (of the heterodimeric Fc backbone pair) can contain identical amino acid substitutions. In other instances, monomer 1 and monomer 2 can contain at least one amino acid substitution that is the same. In still other instances, monomer 1 and monomer 2 can contain amino acid substitutions that are unique to each monomer. In some embodiments, the heterodimeric Fc backbone pairs have ablated FcγR function, including, but not limited to, those pairs of Fc backbones shown in the Figures. In some embodiments, each of the first and second Fc domains include the ablation variants E233P/L234V/L235A/G236_/S267K, wherein numbering is according to EU numbering. In some embodiments, one or both of the Fc domains include one or more amino acid substitutions such that one or both of the Fc domains have an ablated FcγR function, and optionally one or more of: (i) one or more skew variants, (ii) one or more Fc ADCC variants, (iii) one or more variants that improve serum half-life, (iv) one or more pI variants in the constant domain of the first and/or second monomer, or (v) any combination thereof.

[0686] In some embodiments, the constant domain (CH1-hinge-CH2-CH3) of the first and/or

second monomer includes pI variants (including, but not limited to, those shown in Figs. 4, 5, and 10). In exemplary embodiments, the constant domain (CH1-hinge-CH2-CH3) of the first or second monomer includes pI variants N208D/Q295E/N384D/Q418E/N421D, wherein numbering is according to EU numbering. In some embodiments, the constant domain of the first and/or second monomer includes pI variants (including, but not limited to, those shown in Figs. 4, 5, and 10), and the first and/or second Fc domain optionally contains one or more of: (i) one or more skew variants, (ii) one or more ablation variants, (iii) one or more variants that improve serum half-life, (iv) one or more Fc ADCC variants, or (v) any combination thereof.

[0687] In some embodiments, the first scFv or the second scFv is the domain that binds to the NKp46 antigen. Any suitable NKp46 V_H/V_L pairs described herein (and in the Figures), or a variant thereof, can be included in the subject dual scFv format antibody.

[0688] In some embodiments, the first scFv or the second scFv is the domain that binds to the MICA/B antigen. Any suitable MICA/B V_H/V_L pairs described herein (and in the Figures), or a variant thereof, can be included in the subject dual scFv format antibody.

10. <u>One-Armed scFv-mAb Format</u>

[0689] One heterodimeric scaffold that finds particular use in the antibodies described herein is the "one-armed scFv-mAb" format. This format includes: 1) a first monomer that comprises an "empty" Fc domain; 2) a second monomer that includes a first variable heavy domain (V_H), a scFv domain (a second ABD), an Fc domain, where the scFv domain is attached to the N-terminus of the first variably heavy domain; and 3) a light chain that includes a first variable light domain and a constant light domain. The first variable heavy domain and the first variable light domain form a first antigen binding domain and the scFv is a second antigen binding domain. In this format, one of the first ABDs and the second ABDs binds a NKp46 antigen, and the other ABD binds a MICA/B antigen. As for many of the embodiments herein, these constructs can include one or more of: (i) Fc ADCC variants, (ii) pI variants, (iii) ablation variants, (iv) skew variants, (v) variants that improve serum half-life, as well as any combination thereof, as desired and described herein.

[0690] Any suitable NKp46 antigen binding domain (as described herein and in the Figures, or a variant thereof) can be included in the subject one-armed scFv-mAb format antibody.

[0691] Any suitable MICA/B antigen binding domain (as described herein and in the Figures, or a variant thereof) can be included in the subject one-armed scFv-mAb format antibody.

11. Central Fv Format

[0692] One heterodimeric scaffold that finds particular use in the antibodies described herein is the "central-Fv" format. In this embodiment, the format relies on the use of an inserted Fv domain (i.e., the central Fv domain) thus forming an "extra" third ABD, wherein the Fab portions of the two monomers bind a MICA/B antigen and the "extra" central Fv domain binds a NKp46 antigen. Alternatively, the Fab portions of the two monomers can bind a NKp46 antigen and the "extra" central Fv domain binds a MICA/B antigen. The Fv domain is inserted between the Fc domain and the CH1-Fv region of the monomers, thus providing a third ABD, wherein each monomer contains a component of the Fv (e.g., one monomer comprises a variable heavy domain and the other comprises a variable light domain of the "extra" central Fv domain).

[0693] In this embodiment, one monomer comprises a first heavy chain comprising a first variable heavy domain, a CH1 domain, and Fc domain, and an additional variable light domain. The additional variable light domain is covalently attached between the C-terminus of the CH1 domain of the heavy constant domain and the N-terminus of the first Fc domain using domain linkers (VH1-CH1-[optional linker]-VL2-hinge-CH2-CH3). The other monomer comprises a first heavy chain comprising a first variable heavy domain, a CH1 domain and Fc domain, and an additional variable heavy domain (VH1-CH1-[optional linker]-VH2-hinge-CH2-CH3). The additional variable heavy domain is covalently attached between the C-terminus of the CH1 domain of the heavy constant domain and the N-terminus of the first Fc domain using domain linkers. This embodiment further utilizes a common light chain comprising a variable light domain and a constant light domain, that associates with the heavy chains to form two identical Fabs that each bind a MICA/B antigen. The additional variable heavy domain and additional variable light domain form an "extra" central Fc that binds a NKp46 antigen. As for many of the embodiments herein, these constructs can include one or more of: (i) Fc ADCC variants, (ii) pI variants, (iii) ablation variants, (iv) skew variants, (v) variants that improve serum half-life, as well as any combination thereof, as desired and described herein.

[0694] Any suitable NKp46 antigen binding domain (as described herein and in the Figures, or a variant thereof) can be included in the subject central-Fv format antibody.

[0695] Any suitable MICA/B antigen binding domain (as described herein and in the Figures, or a variant thereof) can be included in the subject central-Fv format antibody.

12. scFv-mAb Format

[0696] One heterodimeric scaffold that finds particular use in the antibodies described herein is the "scFv-mAb" format. In this embodiment, the format relies on the use of a N-terminal attachment of a scFv to one of the monomers, thus forming a third ABD, wherein the Fab portions of the two monomers bind a MICA/B antigen and the "extra" scFv domain binds a NKp46 antigen. Alternatively, the Fab portions of the two monomers can bind a NKp46 antigen and the "extra" scFv domain can bind a MICA/B antigen.

[0697] In this embodiment, the first monomer comprises a first heavy chain (comprising a variable heavy domain and a constant domain), with a N-terminally covalently attached scFv comprising a scFv variable light domain, an scFv linker, and a scFv variable heavy domain in either orientation ((VH1-scFv linker-VL1-[optional domain linker]-VH2-CH1-hinge-CH2-CH3) or (with the scFv in the opposite orientation (VL1-scFv linker-VH1-[optional domain linker]-VH2-CH1-hinge-CH2-CH3))). This embodiment further utilizes a common light chain comprising a variable light domain and a constant light domain that associates with the heavy chains to form two identical Fabs that bind a MICA/B antigen. As for many of the embodiments herein, these constructs can include one or more of: (i) Fc ADCC variants, (ii) pI variants, (iii) ablation variants, (iv) skew variants, (v) variants that improve serum half-life, as well as any combination thereof, as desired and described herein.

[0698] Any suitable NKp46 antigen binding domain (as described herein and in the Figures, or a variant thereof) can be included in the subject scFv-mAb format antibody.

[0699] Any suitable MICA/B antigen binding domain (as described herein and in the Figures, or a variant thereof) can be included in the subject scFv-mAb format antibody.

13. Non-heterodimeric Bispecific Antibodies

[0700] As will be appreciated by those in the art, the anti-NKp46 × anti-MICA/B antibodies provided herein can also be included in non-heterodimeric bispecific formats. In this format, the anti-NKp46 × anti-MICA/B antibody includes: (i) a first monomer comprising a VH1-CH1-hinge-CH2-CH3, (ii) a second monomer comprising a VH2-CH1-hinge-CH2-CH3, (iii) a first

light chain comprising a VL1-C_L, and (iv) a second light chain comprising a VL2-C_L. In such embodiments, the VH1 and VL1 form a first ABD, and VH2 and VL2 form a second ABD. One of the first or second ABDS binds a MICA/B antigen, and the other ABD binds a NKp46 antigen.

[0701] Any suitable NKp46 antigen binding domain (as described herein and in the Figures, or a variant thereof) can be included in the subject non-heterodimeric bispecific format antibody.

[0702] Any suitable MICA/B antigen binding domain (as described herein and in the Figures, or a variant thereof) can be included in the subject non-heterodimeric bispecific format antibody.

14. Trident Format

[0703] In some embodiments, the bispecific antibodies described herein are in the "Trident" format as generally described in WO2015/184203, hereby expressly incorporated by reference in its entirety and in particular for the Figures, Legends, definitions, and sequences of "Heterodimer-Promoting Domains" or "HPDs," including "K-coil" and "E-coil" sequences, and as are shown in Fig. 25M herein. Tridents rely on using two different HPDs that associate to form a heterodimeric structure as a component of the structure. In this embodiment, the Trident format includes a "traditional" heavy and light chain (e.g., VH1-CH1-hinge-CH2-CH3 and VL1-CL), a third chain comprising a first "diabody-type binding domain" or "DART®," VH2-(linker)-VL3-HPD1, and a fourth chain comprising a second DART®, VH3-(linker)-(linker)-VL2-HPD2. The VH1 and VL1 form a first ABD, the VH2 and VL2 form a second ABD, and the VH3 and VL3 form a third ABD. In some cases, the second and third ABDs bind the same antigen, in this instance generally a MICA/B antigen, e.g., bivalently, with the first ABD binding a NKp46 antigen monovalently. In other cases, the second and third ABDs bind the same antigen, in this instance generally a NKp46 antigen, e.g., bivalently, with the first ABD binding a MICA/B antigen monovalently.

[0704] Any suitable NKp46 antigen binding domain (as described herein and in the Figures, or a variant thereof) can be included in the subject Trident format antibody.

[0705] Any suitable MICA/B antigen binding domain (as described herein and in the Figures, or a variant thereof) can be included in the subject Trident format antibody.

15. Monospecific, Monoclonal Antibodies

[0706] As will be appreciated by those in the art, the novel MICA/B ABD sequences outlined herein can also be used in both monospecific antibodies (e.g., "traditional monoclonal antibodies") or non-heterodimeric bispecific formats. Accordingly, in some embodiments, the antibodies described herein provide monoclonal (monospecific) antibodies comprising the 6 CDRs and/or the vh and vl sequences from the figures, generally with IgG1, IgG2, or IgG4 constant regions, with IgG1, IgG2 and IgG4 (including IgG4 constant regions comprising a S228P amino acid substitution) finding particular use in some embodiments. That is, any sequence herein with a "H_L" designation can be linked to the constant region of a human IgG1 antibody.

[0707] Any suitable MICA/B ABD can be included in the monospecific antibody, including any of the MICA/B ABDs described herein (see, e.g., Figs. 21 and 22). In some embodiments, the monospecific antibody is a MICA/B monospecific antibody that has a V_H_V_L pair selected from the group including: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ

ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID

Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, or variants thereof (see, e.g., Figs. 21 and 22).

[0708] In particular monoclonal embodiments, the V_H_V_L pair is selected from the group including: (i) D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (ii) D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (iii) D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (iv) D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (v) D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (vi) 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (vii) 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (viii) 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (ix) 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (x) 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xi) D94852_2E12

[MICA/B]_H0_D94852_2E12 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xii) D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xiii) D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xiv) D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xv) D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xvi) D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xvii) D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xviii) D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xix) D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xx) D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxi) D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxii) D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxiii) D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxiv) D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxv) D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxvi) D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxvii) D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxviii) D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxix) D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxx) D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxi) D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxxii) D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxxiii) D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxiv) D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxxv) D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxvi) D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxxvii) D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxxviii) D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxix)

D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xl) D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xli) D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlii) D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xliii) D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xliv) D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlv) D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlvi) D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlvii) D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlviii) D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlix) D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (l) D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (li) D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lii) D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (liii) D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (liv) D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lv) D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lvi) D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lvii) 3F9[MICA/B]_H0_3F9[MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lviii) 6E1[MICA/B]_H0_6E1[MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lix) 7C6[MICA/B]_H0_7C6[MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lx) 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), and (lxi) 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX).

[0709] Similarly, the novel NKp46 ABD sequences outlined herein can also be used in both monospecific antibodies (e.g., "traditional monoclonal antibodies") or non-heterodimeric bispecific formats. Accordingly, in some embodiments, the antibodies described herein provide monoclonal (monospecific) antibodies comprising the 6 CDRs and/or the vh and vl sequences from the figures, generally with IgG1, IgG2, or IgG4 constant regions, with IgG1, IgG2 and IgG4 (including IgG4 constant regions comprising a S228P amino acid substitution) finding particular use in some embodiments. That is, any sequence herein with a "H_L" designation can

be linked to the constant region of a human IgG1 antibody.

[0710] Any suitable NKp46 ABD can be included in the monospecific antibody, including any of the NKp46 ABDs described herein (see, e.g., Figs. 23 and 24). In some embodiments, the monospecific antibody is a NKp46 monospecific antibody that has a V_H_V_L pair selected from the group including: (i) SEQ ID NOs: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, or variants thereof (see, e.g., Figs. 23 and 24).

[0711] In particular monoclonal embodiments, the V_H_V_L pair is selected from the group including: 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1 (SEQ ID NOs: XXX and XXX), and NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L (SEQ ID NOs: XXX and XXX).

I. Particular Embodiments of the Invention with Increased Binding to FcγRIIIa

[0712] In particular 1 + 1 format embodiments, the αNKp46 ABD is the Fab and has the V_H_V_L pair selected from the group including: (i) 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1 (SEQ ID NOs: XXX and XXX), and (ii) NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L (SEQ ID NOs: XXX and XXX); and the αMICA/B is a scFv selected from the group including: (i) D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (ii) D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (iii) D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (iv) D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (v) D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (vi) 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (vii) 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (viii) 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (ix) 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (x) 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xi) D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xii) D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xiii) D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xiv) D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1 (SEQ ID NOs: XXX

and XXX), (xv) D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xvi) D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xvii) D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xviii) D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xix) D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xx) D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxi) D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxii) D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxiii) D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxiv) D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxv) D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxvi) D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxvii) D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxviii) D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxix) D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxx) D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxi) D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxxii) D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxxiii) D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxiv) D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxxv) D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxvi) D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxxvii) D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxxviii) D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxix) D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xl) D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xli) D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlii) D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0 (SEQ ID

NOs: XXX and XXX), (xliii) D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xliv) D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlv) D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlvi) D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlvii) D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlviii) D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlix) D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (l) D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (li) D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lii) D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (liii) D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (liv) D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lv) D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lvi) D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lvii) 3F9[MICA/B]_H0_3F9[MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lviii) 6E1[MICA/B]_H0_6E1[MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lix) 7C6[MICA/B]_H0_7C6[MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lx) 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), and (lxi) 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX).

[0713] In particular 1 + 1 format embodiments, the αMICA/B ABD is the Fab and has the V_H_V_L pair selected from the group including: (i) D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (ii) D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (iii) D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (iv) D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (v) D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (vi) 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (vii) 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (viii) 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (ix) 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (x) 2E5 [MICA/B]_H2_2E5

[MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xi) D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xii) D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xiii) D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xiv) D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xv) D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xvi) D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xvii) D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xviii) D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xix) D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xx) D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxi) D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxii) D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxiii) D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxiv) D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxv) D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxvi) D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxvii) D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxviii) D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxix) D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxx) D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxi) D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxxii) D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxxiii) D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxiv) D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxxv) D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxvi) D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxxvii) D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxxviii) D99136_2C11

[MICA/B]_H1_D99136_2C11 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxix) D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xl) D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xli) D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlii) D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xliii) D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xliv) D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlv) D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlvi) D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlvii) D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlviii) D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlix) D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (l) D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (li) D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lii) D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (liii) D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (liv) D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lv) D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lvi) D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lvii) 3F9[MICA/B]_H0_3F9[MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lviii) 6E1[MICA/B]_H0_6E1[MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lix) 7C6[MICA/B]_H0_7C6[MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lx) 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), and (lxi) 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX); and the αNKp46 is a scFv selected from the group including: (i) 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1 (SEQ ID NOs: XXX and XXX), and (ii) NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L (SEQ ID NOs: XXX and XXX).

[0714] In particular 2 + 1 format embodiments, the αNKp46 ABD is the Fab and has the V_H_V_L pair selected from the group including: (i) 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1 (SEQ ID NOs: XXX and XXX), and (ii) NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L (SEQ ID

NOs: XXX and XXX); and the αMICA/B is a scFv selected from the group including: (i) D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (ii) D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (iii) D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (iv) D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (v) D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (vi) 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (vii) 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (viii) 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (ix) 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (x) 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xi) D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xii) D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xiii) D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xiv) D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xv) D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xvi) D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xvii) D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xviii) D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xix) D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xx) D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxi) D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxii) D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxiii) D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxiv) D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxv) D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxvi) D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxvii) D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxviii) D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxix) D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1

(SEQ ID NOs: XXX and XXX), (xxx) D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxi) D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxxii) D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxxiii) D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxiv) D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxxv) D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxvi) D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxxvii) D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxxviii) D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxix) D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xl) D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xli) D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlii) D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xliii) D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xliv) D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlv) D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlvi) D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlvii) D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlviii) D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlix) D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (l) D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (li) D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lii) D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (liii) D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (liv) D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lv) D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lvi) D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lvii) 3F9[MICA/B]_H0_3F9[MICA/B]_L0 (SEQ ID NOs: XXX and

XXX), (lviii) 6E1[MICA/B]_H0_6E1[MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lix) 7C6[MICA/B]_H0_7C6[MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lx) 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), and (lxi) 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX).

[0715] In particular 2 + 1 format embodiments, the αMICA/B ABD is the Fab and has the V_H_V_L pair selected from the group including: (i) D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (ii) D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (iii) D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (iv) D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (v) D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (vi) 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (vii) 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (viii) 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (ix) 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (x) 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xi) D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xii) D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xiii) D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xiv) D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xv) D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xvi) D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xvii) D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xviii) D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xix) D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xx) D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxi) D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxii) D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxiii) D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxiv) D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX),

(xxv) D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxvi) D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxvii) D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxviii) D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxix) D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxx) D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxi) D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxxii) D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxxiii) D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxiv) D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxxv) D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxvi) D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xxxvii) D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xxxviii) D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xxxix) D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1 (SEQ ID NOs: XXX and XXX), (xl) D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2 (SEQ ID NOs: XXX and XXX), (xli) D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlii) D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xliii) D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xliv) D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlv) D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlvi) D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlvii) D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlviii) D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (xlix) D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (l) D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (li) D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lii) D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0 (SEQ ID NOs:

XXX and XXX), (liii) D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (liv) D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lv) D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lvi) D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lvii) 3F9[MICA/B]_H0_3F9[MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lviii) 6E1[MICA/B]_H0_6E1[MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lix) 7C6[MICA/B]_H0_7C6[MICA/B]_L0 (SEQ ID NOs: XXX and XXX), (lx) 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX), and (lxi) 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0 (SEQ ID NOs: XXX and XXX); and the αNKp46 is a scFv selected from the group including: (i) 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1 (SEQ ID NOs: XXX and XXX), and (ii) NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L (SEQ ID NOs: XXX and XXX).

J. Additional Embodiments

[0716] [**Embodiment A**] In one embodiment, the disclosure provides a heterodimeric antibody, comprising: (a) a first monomer; (b) a second monomer; and (c) a third monomer, wherein the first monomer, the second monomer, and the third monomer comprise: (i) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP44543, respectively, (ii) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP45903, respectively, (iii) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP45902, respectively, (iv) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP44549, respectively, (v) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP44551, respectively, (vi) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP44553, respectively, or (vii) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP44552, respectively, as depicted in Fig. 71.

[0717] [**Embodiment B**] In another embodiment, the disclosure provides a nucleic acid composition comprising nucleic acids encoding the first monomer, the second monomer, and the third monomer of any one of the heterodimeric antibodies of Embodiment A.

[0718] [**Embodiment C**] In another embodiment, the disclosure provides an expression vector comprising the nucleic acid(s) of Embodiment B.

[0719] [**Embodiment D**] In another embodiment, the disclosure provides a host cell transformed

with the expression vector of Embodiment C.

[0720] [**Embodiment E**] In another embodiment, the disclosure provides a method of making a heterodimeric antibody, comprising: (a) culturing the host cell of Embodiment D under conditions wherein the heterodimeric antibody is expressed; and (b) recovering the heterodimeric antibody.

[0721] [**Embodiment F**] In another embodiment, the disclosure provides a method of treating cancer, comprising: administering to a human subject an antibody comprising any one of the heterodimeric antibodies of Embodiment A.

[0722] [**Embodiment G**] In another embodiment, the disclosure provides a heterodimeric antibody, comprising: (a) a first monomer, comprising: (i) an anti-NKp46 scFv comprising a first variable heavy VH1 domain, an scFv linker, and a first variable light VL1 domain, and (ii) a first Fc domain, wherein the scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker; (b) a second monomer comprising a VH2-CH1-hinge-CH2-CH3 monomer, wherein VH2 is a second variable heavy domain and CH2-CH3 is a second Fc domain; and (c) a light chain comprising a second variable light VL2 domain, wherein the second variable heavy VH2 domain and the second variable light VL2 domain form a B7H3 antigen binding domain.

[0723] [**Embodiment H**] In another embodiment, the disclosure provides the heterodimeric antibody of Embodiment G, wherein the first monomer, the second monomer, and the light chain of the heterodimeric antibody are selected from the group including: (i) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP44543, respectively, (ii) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP45903, respectively, (iii) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP45902, respectively, (iv) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP44549, respectively, (v) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP44551, respectively, (vi) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP44553, respectively, and (vii) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP44552, respectively, as depicted in Fig. 71.

[0724] [**EMBODIMENT I**] In another embodiment, the disclosure provides a method of treating cancer, comprising: administering to a human subject an antibody comprising: (i) a MICA/B antigen binding domain as described herein, (ii) a NKp46 antigen binding domain as

described herein, or (iii) a heterodimeric antibody as described herein, to the human subject.

[0725] [**EMBODIMENT J**] In another embodiment and in accordance with Embodiment I, the disclosure provides a method further comprising administering an IL-15-Fc fusion protein to the human subject.

[0726] [**EMBODIMENT K**] In another embodiment and in accordance with Embodiment K, the disclosure provides a method further comprising administering an IL-15-Fc fusion protein to the human subject, wherein the IL-15-Fc fusion protein comprises the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP24045.

[0727] [**EMBODIMENT L**] In another embodiment, the disclosure provides a method of blocking MICA/B shedding by NK cells in a human subject, the method comprising: administering to the human subject a therapeutically effective amount of an antibody comprising: (i) a MICA/B antigen binding domain as described herein, or (ii) a heterodimeric antibody as described herein.

[0728] [**EMBODIMENT M**] In another embodiment and in accordance with Embodiment L, the disclosure provides a method wherein CD16 and/or NKG2D is activated on the NK cells.

[0729] [**EMBODIMENT N**] In another embodiment and in accordance with Embodiment L or M, the disclosure provides a method further comprising administering an IL-15-Fc fusion protein to the human subject.

[0730] [**EMBODIMENT O**] In another embodiment and in accordance with Embodiment N, the disclosure provides a method further comprising administering an IL-15-Fc fusion protein to the human subject, wherein the IL-15-Fc fusion protein comprises the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP24045.

VI. Nucleic Acids

[0731] The disclosure further provides nucleic acid compositions encoding the anti-NKp46 antibodies provided herein, including, but not limited to, NKp46 × MICA/B bispecific antibodies and NKp46 monospecific antibodies.

[0732] As will be appreciated by those in the art, the nucleic acid compositions will depend on the format and scaffold of the heterodimeric protein. Thus, for example, when the format

requires three amino acid sequences, such as for the 1 + 1 Fab-scFv-Fc format (e.g., a first amino acid monomer comprising an Fc domain and a scFv, a second amino acid monomer comprising a heavy chain and a light chain), three nucleic acid sequences can be incorporated into one or more expression vectors for expression. Similarly, some formats (e.g., dual scFv formats) only two nucleic acids are needed; again, they can be put into one or two expression vectors.

[0733] As is known in the art, the nucleic acids encoding the components of the antibodies described herein can be incorporated into expression vectors as is known in the art, and depending on the host cells used to produce the heterodimeric antibodies described herein. Generally the nucleic acids are operably linked to any number of regulatory elements (promoters, origin of replication, selectable markers, ribosomal binding sites, inducers, etc.). The expression vectors can be extra-chromosomal or integrating vectors.

[0734] The nucleic acids and/or expression vectors of the antibodies described herein are then transformed into any number of different types of host cells as is well known in the art, including mammalian, bacterial, yeast, insect and/or fungal cells, with mammalian cells (e.g., CHO cells), finding use in many embodiments.

[0735] In some embodiments, nucleic acids encoding each monomer and the optional nucleic acid encoding a light chain, as applicable depending on the format, are each contained within a single expression vector, generally under different or the same promoter controls. In embodiments of particular use in the antibodies described herein, each of these two or three nucleic acids are contained on a different expression vector. As shown herein and in US9,822,186, hereby incorporated by reference, different vector ratios can be used to drive heterodimer formation. That is, surprisingly, while the proteins comprise first monomer:second monomer:light chains (in the case of many of the embodiments herein that have three polypeptides comprising the heterodimeric antibody) in a 1:1:2 ratio, these are not the ratios that give the best results.

[0736] The heterodimeric antibodies described herein are made by culturing host cells comprising the expression vector(s) as is well known in the art. Once produced, traditional antibody purification steps are done, including an ion exchange chromatography step. As discussed herein, having the pIs of the two monomers differ by at least 0.5 can allow separation by ion exchange chromatography or isoelectric focusing, or other methods sensitive to isoelectric

point. That is, the inclusion of pI substitutions that alter the isoelectric point (pI) of each monomer so that such that each monomer has a different pI and the heterodimer also has a distinct pI, thus facilitating isoelectric purification of the "1 + 1 Fab-scFv-Fc" and "2 + 1" heterodimers (e.g., anionic exchange columns, cationic exchange columns). These substitutions also aid in the determination and monitoring of any contaminating dual scFv-Fc and mAb homodimers post-purification (e.g., IEF gels, cIEF, and analytical IEX columns).

[0737] Additionally, as is known in the art, N- and/or C-terminal clipping can occur during protein synthesis, whereby the heavy chains depicted herein may have the C-terminal lysine (K447) removed, as well as the penultimate glycine (G446), and optionally additional amino acids residues (e.g., from 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or more C-terminal amino acids can be removed). Alternatively, the nucleic acids encoding the heavy chains of the bispecific antibodies can be engineered such that these terminal residues are eliminated entirely to facilitate additional homogeneity.

VII. Biological and Biochemical Functionality of the Heterodimeric Bispecific Antibodies

[0738] Generally, the bispecific NKp46 × MICA/B antibodies described herein are administered to patients with cancer, and efficacy is assessed, in a number of ways as described herein. Thus, while standard assays of efficacy can be run, such as cancer load, size of tumor, evaluation of presence or extent of metastasis, etc., immuno-oncology treatments can be assessed on the basis of immune status evaluations as well. This can be done in a number of ways, including both in vitro and in vivo assays.

VIII. Treatments

[0739] Once made, the compositions of the invention find use in a number of oncology applications, by treating cancer, generally by enhancing immune responses, including, activating NK cells, enhancing NK cell mediated lysis of tumor cells. Such compositions can be combined with proinflammatory cytokines for increased cytotoxicity against tumor cells.

A. Combination with Interleukin 15 Therapies

[0740] In some embodiments, a bispecific anti-NKp46 × anti-MICA/B antibody described herein

can be used in combination with an IL-15 therapy. In some embodiments, the IL-15 therapy includes, but is not limited to, an IL-15-Fc based therapy.

[0741] Non-limiting examples of an IL-15 therapy include administration to a human subject an IL-15 protein or a fragment thereof, an IL-15 variant protein or a fragment thereof, an IL-15 fusion protein, or an IL-15 agonist. Useful IL-15 fusion proteins include, but are not limited to those shown in Fig. 66, such as, for example, XENP24045. Sequences of exemplary IL-15 fusion proteins are provided in the sequence listing, such as, for example, SEQ ID NOs: XXX-XXX, as shown in Fig. 66.

[0742] IL-15 agonists are well-known in the art. Non-limiting examples of IL-15 agonists include PF-07209960 (Pfizer), KD033 (Kadmon), SOT201/SO-C108 (SOTIO/Cytune), SOT101/SO C101/RLI-15 (SOTIO/Cytune), XmAb24306 (Genentech/Xencor), NKTR-255 (Nektar), ALT-803/N-803/Anktiva (Altor Bioscience), and NIZ985 (Novartis). In some embodiments, the IL-15 agonist is an IL-15 protein. The wild-type human IL-15 protein comprises the amino acid sequence shown in FIG. 22C (see, e.g., SEQ ID NOs: 1079 and 1080) of U.S. Publication No. 2023/0151095, which is incorporated herein by reference in its entirety. In some embodiments, the IL-15 agonist is an IL-15 variant protein. IL-15 variant proteins are well-known in the art. See, e.g., U.S. Pat. Nos. 5,552,303; 5,574,138; 6,001,973; 6,013,480; 6,548,065; 6,764,836; 6,998,476; 7,858,081; 8,163,879; 8,178,660; 8,415,456; 8,507,222; 8,940,288; 9,303,080; 9,365,630; 9,371,368; 9,428,563; 9,428,573; 9,493,533; 9,725,492; 9,790,261; 9,932,387; and 9,975,937; U.S. Publication Nos. 2004/009149, 2006/0057680, 2006/0236411, 2006/0257361, 2007/0106066, 2007/0134718, 2009/0105455, 2009/0238791, 2015/0359853, 2016/0130318, 2016/0175459, 2016/0184399, 2016/0275236, 2017/0020963, 2017/0202924, 2017/0246253, 2018/0044424, 2018/0126003, and 2018/0200366; and PCT Publication Nos. WO9527722, WO2016095642, WO2017081082, WO2017046200, WO2017136818, WO2018013855 WO2018023093, WO2018071918, and WO2018071919, each of which is incorporated herein by reference in its entirety. Sequences of human IL-15 proteins, such as the precursor protein and the mature protein are set for in FIG. 22C as SEQ ID NOS:1079 and 1080 in U.S. Publication No. 2023/0151095. Further, sequences for: human IL-15Rα, the extracellular domain of human IL-15Rα, human IL-15Rα sushi domain, human IL-15Rβ, and the extracellular domain of human IL-15Rβ are set forth in FIGS. 22C-22D of U.S.

Publication No. 2023/0151095 as SEQ ID NOs: 1081, 1082, 1083, 1084, and 1085, respectively, each of which is incorporated by reference in their entirety.

[0743] In some instances, administered "in combination", as used herein, means that two (or more) different treatments are delivered to the subject during the course of the subject's affliction with the disorder, e.g., the two or more treatments are delivered after the subject has been diagnosed with the disorder and before the disorder has been cured or eliminated or treatment has ceased for other reasons. In some embodiments, the delivery of one treatment is still occurring when the delivery of the second begins, so that there is overlap in terms of administration. This is sometimes referred to herein as "simultaneous" or "concurrent delivery". In other embodiments, the delivery of one treatment ends before the delivery of the other treatment begins. In some embodiments of either case, the treatment is more effective because of combined administration. For example, the second treatment is more effective, e.g., an equivalent effect is seen with less of the second treatment, or the second treatment reduces symptoms to a greater extent, than would be seen if the second treatment were administered in the absence of the first treatment, or the analogous situation is seen with the first treatment. In some embodiments, delivery is such that the reduction in a symptom, or other parameter related to the disorder is greater than what would be observed with one treatment delivered in the absence of the other. The effect of the two treatments can be partially additive, wholly additive, or greater than additive. The delivery can be such that an effect of the first treatment delivered is still detectable when the second is delivered.

B. Antibody Compositions for In Vivo Administration

[0744] Formulations of the antibodies used in accordance with the antibodies described herein are prepared for storage by mixing an antibody having the desired degree of purity with optional pharmaceutically acceptable carriers, excipients, or stabilizers (Remington's Pharmaceutical Sciences 16th edition, Osol, A. Ed. [1980]), in the form of lyophilized formulations or aqueous solutions.

C. Administration Modalities

[0745] The antibodies provided herein administered to a subject, in accord with known methods,

such as intravenous administration as a bolus or by continuous infusion over a period of time.

D. Treatment Modalities

[0746] In the methods described herein, therapy is used to provide a positive therapeutic response with respect to a disease or condition. By "positive therapeutic response" is intended an improvement in the disease or condition, and/or an improvement in the symptoms associated with the disease or condition. For example, a positive therapeutic response would refer to one or more of the following improvements in the disease: (1) a reduction in the number of neoplastic cells; (2) an increase in neoplastic cell death; (3) inhibition of neoplastic cell survival; (5) inhibition (i.e., slowing to some extent, preferably halting) of tumor growth; (6) an increased patient survival rate; and (7) some relief from one or more symptoms associated with the disease or condition.

[0747] Positive therapeutic responses in any given disease or condition can be determined by standardized response criteria specific to that disease or condition. Tumor response can be assessed for changes in tumor morphology (i.e., overall tumor burden, tumor size, and the like) using screening techniques such as magnetic resonance imaging (MM) scan, x-radiographic imaging, computed tomographic (CT) scan, bone scan imaging, endoscopy, and tumor biopsy sampling including bone marrow aspiration (BMA) and counting of tumor cells in the circulation.

[0748] In addition to these positive therapeutic responses, the subject undergoing therapy may experience the beneficial effect of an improvement in the symptoms associated with the disease.

[0749] Treatment according to the disclosure includes a "therapeutically effective amount" of the medicaments used. A "therapeutically effective amount" refers to an amount effective, at dosages and for periods of time necessary, to achieve a desired therapeutic result.

[0750] A therapeutically effective amount may vary according to factors such as the disease state, age, sex, and weight of the individual, and the ability of the medicaments to elicit a desired response in the individual. A therapeutically effective amount is also one in which any toxic or detrimental effects of the antibody or antibody portion are outweighed by the therapeutically beneficial effects.

[0751] A "therapeutically effective amount" for cancer therapy may also be measured by its ability to stabilize the progression of disease. The ability of a compound to inhibit cancer may be evaluated in an animal model system predictive of efficacy in human tumors.

[0752] Alternatively, this property of a composition may be evaluated by examining the ability of the compound to inhibit cell growth or to induce apoptosis by in vitro assays known to the skilled practitioner. A therapeutically effective amount of a therapeutic compound may decrease tumor size, or otherwise ameliorate symptoms in a subject.

[0753] Dosage regimens are adjusted to provide the optimum desired response (e.g., a therapeutic response). For example, a single bolus may be administered, several divided doses may be administered over time or the dose may be proportionally reduced or increased as indicated by the exigencies of the therapeutic situation. Parenteral compositions may be formulated in dosage unit form for ease of administration and uniformity of dosage. Dosage unit form as used herein refers to physically discrete units suited as unitary dosages for the subjects to be treated; each unit contains a predetermined quantity of active compound calculated to produce the desired therapeutic effect in association with the required pharmaceutical carrier.

[0754] The specification for the dosage unit forms of the disclosure are dictated by and directly dependent on (a) the unique characteristics of the active compound and the particular therapeutic effect to be achieved, and (b) the limitations inherent in the art of compounding such an active compound for the treatment of sensitivity in individuals.

[0755] All cited references are herein expressly incorporated by reference in their entirety.

[0756] Whereas particular embodiments of the disclosure have been described above for purposes of illustration, it will be appreciated by those skilled in the art that numerous variations of the details may be made without departing from the invention as described in the appended claims.

EXAMPLES

[0757] The following examples are presented in order to more fully illustrate some embodiments of the invention. They should, in no way be construed, however, as limiting the broad scope of the invention. One skilled in the art can readily devise many variations and modifications of the

principles disclosed herein without departing from the scope of the invention.

A. Example 1: MICA/B Binding Domains

[0758] Tumor microenvironment induced antigens present a unique opportunity to effectively target diseased tissue over normal and to modulate the immune suppression they might elicit. MICA and MICB (MICA/B) are stress-induced antigens expressed in a range of cancers. As depicted in Figure 47, pan tumor TMA was stained with MICA/B antibodies showing that breast, testis, esophagus, and stomach show tumor MICA/B expression (pancreas, skin, lung, and ovary are additional tumor histologies showing tumor MICA/B expression, not shown). MICA/B antigens are recognized by NKG2D, an activating receptor on NK and CD8+ T cells. While the membrane-bound form of MICA/B is immuno-stimulatory, the cleaved soluble form found in the tumor microenvironment prevents NKG2D mediated tumor cell recognition. To stop tumor escape and, concurrently, stimulate the innate and adaptive immune responses, antibodies targeting MICA/B were developed. Anti-MICA/B antibodies block proteolytic cleavage, increase MICA/B membrane surface densities, and activate NK and CD8+ T cells by bringing membrane bound MICA/B to NKG2D. In summary, MICA/B mechanisms of action include ADCC, NKG2D agonism, and blockade of MICA and MICB cleavage, as depicted in Figure 48. Prior to developing novel MICA/B binding domains, these mechanisms were investigated using a prior art MICA/B antibody.

[0759] NK cells were co-cultured with A375-B2M-KO-RP tumor cell line and dose titration of MICA/B mAb alone, MICA/B mAb with blocking NKG2D mAb, RSV isotype control mAb alone, or RSV mAb with blocking NKG2D mAb. Target lysis and IFNγ secretion are depicted in Figure 49, demonstrating ADCC and NKG2D agonism.

[0760] CHO-MICA cells and CHO-MICB cells were incubated with MICA/B mAb, RSV mAb, or batimastat (an inhibitor of cell surface proteases). Soluble MICA and MICB in the supernatant were measured by ELISA as depicted in Figure 50, demonstrating blockade of sMICA and sMICB.

1A. Novel MICA/B binding domains which block MICA/B shedding and bind multiple alleles

[0761] As depicted in Figure 20, soluble MICA/B (sMICA/B) bind NKG2D receptor on NK

cells inhibiting signaling. Additionally, there are numerous MICA and MICB alleles, sequences for illustrative alleles are depicted in Figures 1 and 2. Population frequencies of MICA and MICB allelic variants are depicted in Figure 51. Accordingly, novel MICA/B binding domains were generated in a campaign using single cell technology to identify MICA/B binding domains that: a) are capable of binding to cell surface MICA/B and prevent shedding; and b) are able to bind multiple alleles. Alignment of α3 domain sequences for MICA and MICB variants with a high population frequency is depicted in Figure 52, to identify higher frequency MICA and MICB variants. Five BALB/c and five C57BL/6J mice were immunized with MICA*002, MICA*004, MICA*008, MICB*004, and MICB*005 to raise antibodies specific for multiple MICA and MICB alleles. Injections were administered in the hock and base of neck, twice weekly for four weeks, with an additional boost 5 days before harvest. Antibody secreting plasma cells were isolated and enriched from lymph nodes harvested from immunized mice. Bulk plasma cells were imported onto a microfluidic chip and single cells were sequestered into individual wells for screening. Each plasma cell was individually screened for secretion of antigen-specific IgG that was detected using an antigen coated bead-based fluorescence assay on the Beacon. Individual cells of interest were lysed, their mRNA captured and used to generate cDNA encoding antibody VH and VL sequences. Sequences for such illustrative MICA/B binding domains (original murine sequences; and sequences humanized using string content optimization as described in see, e.g., U.S. Patent No. 7,657,380, issued February 2, 2010) are depicted in Figure 21. All humanized variants of MICA/B binding domains 1E11-1 and 2C11 (designated as H1L1, H1L2, H2L1, and H2L2) maintained comparable binding to the parental murine H0L0 clones as depicted in Figure 73.

1A(a). Characterizing novel MICA/B binding domain

[0762] In order to begin characterization, the 277 hits obtained from the Beacon screening were cloned into IgG1 WT backbones for a small scale 5mL transfection. Anti-MICA/B antibodies that did not express well (< 200 ug/mL) were removed from consideration, and the remaining 164 antibodies were captured onto anti-human Fc capture chips, and screened against human MICA, cyno MICA ,and human MICB using the Carterra® LSA platform. Out of the 164 antibodies screened, 48 clones showed binding to at least one of the antigens and progressed to further characterization. The KD data for select anti-MICA/B clones is depicted in Figure 72.

These 48 clones were also analyzed via ELISA using the DuoSet® ELISA development system for Human MICA (R&D cat #DY1300). Anti-MICA/B antibodies (at a final concentration of 30ug/ml) were mixed with CHO engineered to express GFP-tagged MICA*004, and then an ELISA plate was coated with anti-MICA antibody and processed according to ELISA kit instructions (R&D cat #DY1300). The ability of the anti-MICA/B antibodies to bind MICA/B and their ability to block shedding were measured, and resulting data showed they are correlated. The levels of soluble MICA detected in the assay and the correlated inhibition of shedding and are depicted in Figure 72.

[0763] Epitope binning was performed on the novel MICA/B binding domains and additional MICA/B binding domains as described below in 1B (formatted as bivalent mAbs with WT Fc), data for which are depicted in Figure 36.

[0764] Next, the ability of the novel MICA/B binding domains to bind to cell surface MICA/B and prevent shedding was investigated further. Surface MICA/B upregulation inversely correlates with soluble MICA/B; therefore, surface MICA/B was used as a readout for screening the novel MICA/B binding domains for their ability to prevent MICA and MICB shedding (see Figure 55). CHO cells were engineered to express various GFP-tagged MICA or MICB alleles and incubated with dose titration of the MICA/B binding domains for 24 or 48 hours. After 24 or 48 hours, supernatant was collected to determined GFP intensity data by Incucyte and analyze the soluble MIC levels. Area under curve (AUC) from the resulting dose responses are plotted, data for which are depicted in Figures 37, 43, and 63 showing that the novel MICA/B binding domains were able to bind/block MICA*004 shedding. Additionally, a similar experiment was performed using A375 cell engineered to over-express MICA*004, data for which are depicted in Figure 44.

[0765] In similar experiments, the ability of the novel MICA/B binding domains to bind multiple MICA and MICB alleles was investigated. Data as depicted in Figures 38 and 39 show that that the novel MICA/B binding domains were able to bind and prevent shedding of multiple MICA and MICB allelic variants. Additionally, data as depicted in Figures 56 and 57 show that the MICA/B binding domains were able to bind both MICA and MICB.

[0766] Next, the ability of the novel MICA/B binding domains to bind and prevent shedding of MICA under normoxic versus hypoxic conditions was investigated, data for which are depicted

in Figures 40, 45, and 46.

[0767] Finally, biological activity of the novel MICA/B binding domains were investigated. NK cells (purified from PBMC using EasySep™ Human NK Cell Isolation Kit from Stemcell Technologies) were incubated with MCF7-RFP target cells at indicated effector:target ratios and incubated with dose titration of the novel MICA/B binding domains (formatted as bivalent mAbs). Data depicting target cell lysis are depicted in Figure 41; and data depicting IFNγ production by NK cells are depicted in Figure 42. Data depicting correlation between IFNγ AUC and target lysis EC50 of different MICA/B mAbs are depicted in Figure 53 to screen for mAbs that enable high IFNγ AUC at low EC50. Figure 54 depicts data corresponding to just 1E11-1. Taken together, the data showed that 1E11-1, 2C11, and 1C7 stood out as some of the clones best able to bind multiple allelic variants of MICA and MICB.

1B. Additional MICA/B binding domains

[0768] Sequences for additional MICA/B binding domains known in the art are depicted in Figure 22 and as SEQ ID NOS: XXX-XXX.

B. Example 2: NKp46 Binding Domains

2A. Novel NKp46 binding domains

[0769] NKp46 is an activating receptor on NK cells. Novel NKp46 binding domains were generated using in-house de novo phage libraries. Sequences for illustrative such NKp46 binding domains are depicted in Figure 23.

2B. Additional NKp46 binding domains

[0770] Sequences for additional NKp46 binding domains are depicted in Figure 24 and as SEQ ID NOS: XXX-XXX. Additionally, NKp46 binding domains are utilized in NKp46 × B7H3 bsAbs as described in Example 3 and depicted in Figure 71.

C. Example 3: B7H3 Binding Domains

[0771] The B7H3 binding domains used herein, and methods of their discovery have been previously described in U.S. Patent Application No. 17/407,135, hereby incorporated by reference. A B7H3 binding domains designated 6A1 utilized herein was obtained from rabbit

hybridoma and humanized using string content optimization (see, e.g., U.S. Patent No. 7,657,380, issued February 2, 2010). Exemplary bivalent antibodies comprising the 6A1 binding domain are depicted in Figure 71.

D. Example 4: Engineering NKp46 × MICA/B bsAbs and NKp46 × B7H3 bsAbs

[0772] A number of formats for NKp46 × MICA/B bsAbs were conceived, illustrative formats for which are outlined below and in Figure 25.

4A(i). 1 + 1 Fab × scFv Format

[0773] One format utilizing a Fab domain and an scFv is the 1 + 1 Fab × scFv format (depicted schematically in Figure 25A) which comprises a first monomer comprising a single-chain Fv ("scFv") with a first antigen binding specificity covalently attached to a first heterodimeric Fc domain, a second monomer comprising a heavy chain variable region (VH) covalently attached to a complementary second heterodimeric Fc domain, and a light chain (LC) transfected separately so that a Fab domain having a second antigen binding specificity is formed with the variable heavy domain. Sequences for illustrative NKp46 × MICA/B bsAbs (based on binding domains as described in Examples 1 and 2) in the 1 + 1 Fab × scFv format are depicted in Figure 31. Additionally, sequences for illustrative NKp46 × B7H3 bsAbs are depicted in Figure 71.

4A(ii). 1 + 1 empty × Fab-scFv Format

[0774] Another format utilizing a Fab domain and an scFv is the 1 + 1 empty × Fab-scFv format (depicted schematically in Figure 25B) which comprises a first monomer comprising a first heterodimeric Fc domain, a second monomer comprising a heavy chain variable region (VH) covalently attached to an scFv further covalently attached to a complementary second heterodimeric Fc domain, and a light chain (LC) transfected separately so that a Fab domain having a second antigen binding specificity is formed with the variable heavy domain. Sequences for illustrative NKp46 × MICA/B bsAbs (based on binding domains as described in Examples 1 and 2) in the 1 + 1 empty × Fab-scFv format are depicted in Figure 32.

4A(iii). 2 + 1 Fab × Fab-scFv Format

[0775] A format utilizing two Fab domains and an scFv is the 2 + 1 Fab × Fab-scFv (depicted schematically in Figure 25C) which comprises a first monomer comprising a VH domain

covalently attached to an scFv (having a first antigen binding specificity) covalently attached to a first heterodimeric Fc domain, a second monomer comprising a VH domain covalently attached to a complementary second heterodimeric Fc domain, and a LC transfected separately so that Fab domains having a second antigen binding specificity are formed with the VH domains. Sequences for illustrative NKp46 × MICA/B bsAbs (based on binding domains as described in Examples 1 and 2) in the 2 + 1 Fab × Fab-scFv format are depicted in Figure 33.

4A(iv). 2 + 1 Fab2 × scFv Format

[0776] A format utilizing two Fab domains and an scFv is the 2 + 1 Fab2 × scFv (depicted schematically in Figure 25D) which comprises a first monomer comprising an scFv (having a first antigen binding specificity) covalently attached to a first heterodimeric Fc domain, a second monomer comprising a VH domain covalently attached to another VH domain that is covalently attached to a complementary second heterodimeric Fc domain, and a LC transfected separately so that Fab domains having a second antigen binding specificity are formed with the VH domains. Sequences for illustrative NKp46 × MICA/B bsAbs (based on binding domains as described in Examples 1 and 2) in the 2 + 1 Fab2 × scFv format are depicted in Figure 34.

4A(v). 2 + 1 mAb-scFv Format

[0777] An additional format utilizing two Fab domains and scFv is the 2 + 1 mAb-scFv format (depicted schematically in Figure 25E) which comprises a first monomer comprising a VH domain covalently attached to a first heterodimeric Fc domain covalently attached to an scFv (having a first antigen binding specificity), a second monomer comprising a VH domain covalently attached to a complementary second heterodimeric Fc domain, and a LC transfected separately so that Fab domains having a second antigen specificity are formed with the VH domains. Sequences for illustrative NKp46 × MICA/B bsAbs (based on binding domains as described in Examples 1 and 2) in the 2 + 1 mAb-scFv format are depicted in Figure 35.

E. Example 5: ADCC-enhanced Fc Engineering

[0778] As depicted in Figure 27, one hypothesized mechanism of action for MICA/B bsAbs is that 1) the bsAb engages MICA/B and tumor antigen on cancer cells, 2) the bsAb engages and activates CD16 on NK cells, and 3) the MICA/B bound by the bsAb engages and signals via NKG2D on NK cells. Accordingly, the antibodies (mAbs and bsAbs) of the invention were

engineered with Fc having WT CD16 binding or enhanced CD16 binding. Fc variants enabling enhanced CD16 binding (or ADCC-enhanced variants) include those in Figure 7. Antibodies were also engineered with FcKO variants PVA_/S267K abrogating CD16 binding to compare with antibodies retaining WT or enhanced CD16 binding.

[0779] ADCC enhancing S239D/I332E Fc variants in antibody constructs can result in decreased stability and a lower yield in production. To address this, B7H3 antibodies in the 1 + 1 Fab-scFv-Fc format (sequences for which are depicted in Figure 28) were engineered and produced with Fc regions having different combinations of S239D and/or I332E substitutions on either one or both Fc monomers, either symmetrically or asymmetrically. B7H3 was used as the ABD in both the Fab and the scFv arm for these test articles so that the binding and activity assays would be solely assessing CD16 engagement and not be impacted by MICA/B binding. Figures 14 and 15 depict the sequences of the various symmetric & asymmetric ADCC-enhanced backbone sequences, both without and with the addition of the Xtend M428L/N434S variants. In order to investigate the ADCC activity, MCF7 cells were seeded in a 96 well plate and incubated overnight. The next day, the ADCC Reporter Bioassay kit from Promega (Catalog # G7018) was used according to the manufacturer's protocol. Test articles and effector cells were added to the MCF7 cells, and after a 6 hour incubation, Bio-Glo luciferase reagent was added and plates were analyzed with an EnVision plate reader. This resulted in the ladder of ADCC activity depicted numerically in Figure 29 and graphically in Figure 30. As demonstrated by the values in Figure 29, this Fc engineering was successful in improving both the production yields and the stability as measured by the melting temperature (Tm). As a general trend, the more similar the Fc region is to the wild-type Fc 239 and 332 positions, the better the stability, but the lower the affinity for CD16 and the lower the ADCC and target cell killing activity. Test articles with only the S239D mutations, such as XENP41023, stood out from this trend in that they showed a significantly better improvement in stability compared to V90 than the constructs with only the I332E variants, such as XENP41024, while also maintaining a similar (and even slightly stronger) affinity for CD16 compared with XENP41024. Overall, the results showed that S239D had less of a negative impact on stability and production than I332E. The range of properties and affinities conferred by the different symmetric and asymmetric Fc variants disclosed may each provide unique advantages in certain contexts.

[0780] The monospecific and bispecific antibodies of the invention may utilize any of the heterodimeric Fc backbones depicted in Figures 12-16.

F. Example 6: Characterizing NKp46 × MICA/B bsAbs

[0781] To enhance the anti-tumor activities of MICA/B antibodies, multi-specific NK cell engaging antibodies were designed with the aim to simultaneously target MICA/B antigens and an orthogonal activating receptor NKp46. It was hypothesized that such bsAbs would have mechanisms of actions of ADCC, NKG2D agonism, blockade MICA and MICB cleavage, and NKp46 agonism (as depicted in Figure 58).

6A. NKp46 × MICA/B bsAb synergistically targets multiple activating pathways

[0782] NK cells were co-cultured with A375-B2M-KO-RFP tumor cell line and NKp46 × MICA/B or RSV × MICA/B bsAbs with WT effector function or KO effector function (i.e. ablated with PVA_/S267K to knockout CD16 binding) with or without NKG2D antibody that blocks MICA binding to the receptor. Tumor cell growth was assessed with Incucyte. The data as depicted in Figures 59 and 60 show that the NKp46 × MICA/B bsAb synergistically targets multiple activating pathways resulting in superior IFNγ secretion and tumor cell kill.

6B. NKp46 x MICA/B bsAbs are superior to MICA/B mAbs

[0783] NK cells were co-cultured with A375-B2M-KO-RFP tumor cell lines and NKp46 × MICA/B bsAbs in various formats and WT or KO effector function. Tumor growth and surface MICA density were assessed with Incucyte, data for which are depicted in Figures 61, 62, and 64. The data show that the bsAbs enabled more potent tumor cell kill than MICA/B, but only when crosslinking CD16.

6C. NKp46 x MICA/B bsAbs combine synergistically with IL-15

[0784] NK cells were co-cultured with A375-B2M-KO-RFP tumor cell lines and NKp46 × MICA/B bsAb or MICA/B mAb, either alone or in combination with IL-15-Fc fusion (sequences for an illustrative IL-15-Fc fusion is depicted in Figure 66), and IFNγ secretion assessed. The data as depicted in Figure 65 show that there was superior synergy in combining the NKp46 x MICA/B bsAb with IL-15-Fc (in comparison to MICA/B mAb).

CLAIMS

WHAT IS CLAIMED IS:

1. A MICA/B antigen binding domain comprising a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for

vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID

NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12

[MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, and (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, as depicted in Figure 21.

2. A MICA/B antigen binding domain comprising a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and

XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for

D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, and (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, as depicted in Figure 21.

3. An antibody comprising a MICA/B antigen binding domain according to claim 1 or 2.

4. The antibody according to claim 3, wherein the antibody is a monoclonal antibody.

5. The antibody according to claim 3, wherein the antibody is a bispecific antibody.

6. A composition comprising a MICA/B antigen binding domain according to claim 1 or 2 or an antibody according to any one of claims 3-5.

7. A nucleic acid composition comprising (a) a first nucleic acid encoding the variable heavy domain according to any one of claims 1-5; and (b) a second nucleic acid encoding the variable light domain according to any one of claims 1-5.

8. An expression vector composition comprising (a) a first expression vector comprising the first nucleic acid according to claim 7; and (b) a second expression vector comprising the second nucleic acid composition according to claim 7.

9. A host cell comprising the expression vector composition according to claim 8.

10. A method of making a MICA/B antigen binding domain or an antibody comprising such, the method comprising culturing a host cell according to claim 9 under conditions wherein the MICA/B antigen binding domain or the antibody comprising such is expressed, and recovering the MICA/B antigen binding domain or the antibody comprising such.

11. A NKp46 antigen binding domain comprising a set of vhCDR1-3 and vlCDR1-3 from a

variable heavy domain and variable light domain pair selected from the group consisting of: SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, as depicted in Figure 23.

12. A NKp46 antigen binding domain comprising a variable heavy domain and variable light domain pair selected from the group consisting of: SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, as depicted in Figure 23.

13. An antibody comprising a NKp46 antigen binding domain according to claim 11 or 12.

14. The antibody according to claim 13, wherein the antibody is a monoclonal antibody.

15. The antibody according to claim 13, wherein the antibody is a bispecific antibody.

16. A composition comprising a NKp46 antigen binding domain according to claim 11 or 12 or an antibody according to any one of claims 13-15.

17. A nucleic acid composition comprising (a) a first nucleic acid encoding the variable heavy domain according to any one of claims 11-15; and (b) a second nucleic acid encoding the variable light domain according to any one of claims 11-15.

18. An expression vector composition comprising (a) a first expression vector comprising the first nucleic acid according to claim 17; and (b) a second expression vector comprising the second nucleic acid composition according to claim 17.

19. A host cell comprising the expression vector composition according to claim 18.

20. A method of making a NKp46 antigen binding domain or an antibody comprising such, the method comprising culturing a host cell according to claim 19 under conditions wherein the MICA/B antigen binding domain or the antibody comprising such is expressed, and recovering the MICA/B antigen binding domain or the antibody comprising such.

21. A heterodimeric antibody, comprising:

(a) a first monomer, comprising:

(i) an anti-NKp46 scFv comprising a first variable heavy VH1 domain, an scFv linker, and a first variable light VL1 domain; and

(ii) a first Fc domain, wherein the scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker;

(b) a second monomer comprising a VH2-CH1-hinge-CH2-CH3 monomer, wherein VH2 is a second variable heavy domain and CH2-CH3 is a second Fc domain; and

(c) a light chain comprising a second variable light VL2 domain,

wherein the second variable heavy VH2 domain and the second variable light VL2 domain form a MICA/B antigen binding domain.

22. The heterodimeric antibody according to claim 21, wherein the MICA/B antigen binding domain comprises a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID

NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID

NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8

[MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

23. The heterodimeric antibody according to claim 21 or 22, wherein the MICA/B antigen binding domain comprises a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos:

XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1,

(xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5

[MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

24. The heterodimeric antibody according to any one of claims 21-23, wherein the anti-NKp46 scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a first variable heavy VH1 domain and first variable light VL1 domain pair selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

25. The heterodimeric antibody according to any one of claims 21-24, wherein the anti-NKp46 scFv comprises a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

26. The heterodimeric antibody according to any one of claims 21-25, wherein the first variable light VL1 domain of the anti-NKp46 scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker.

27. The heterodimeric antibody according to any one of claims 21-25, wherein the first variable heavy VH1 domain of the anti-NKp46 scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker.

28. The heterodimeric antibody according to any one of claims 21-27 selected from the group consisting of: (i) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP46810, (ii) the amino acid sequences of SEQ ID NOS: XXX-XXX of XENP46811, and (iii) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP46812, as depicted in Figure 31.

29. A heterodimeric antibody, comprising:

(a) a first monomer, comprising:

(i) an anti-MICA/B scFv comprising a first variable heavy VH1 domain, an scFv

linker, and a first variable light VL1 domain; and

(ii) a first Fc domain, wherein the scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker;

(b) a second monomer comprising a VH2-CH1-hinge-CH2-CH3 monomer, wherein VH2 is a second variable heavy domain and CH2-CH3 is a second Fc domain; and

(c) a light chain comprising a second variable light VL2 domain,

wherein the second variable heavy VH2 domain and the second variable light VL2 domain form a NKp46 antigen binding domain.

30. The heterodimeric antibody according to claim 29, wherein the NKp46 antigen binding domain comprises a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

31. The heterodimeric antibody according to claim 29 or 30, wherein the NKp46 antigen binding domain comprises a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

32. The heterodimeric antibody according to any one of claims 29-31, wherein the anti-MICA/B scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a first variable heavy VH1 domain and first variable light VL1 domain pair selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3

and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7

[MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for

vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ

ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

33. The heterodimeric antibody according to any one of claims 29-32, wherein the anti-MICA/B scFv comprises a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and

XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for

D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

34. The heterodimeric antibody according to any one of claims 29-33, wherein the first variable light VL1 domain of the anti-MICA/B scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker.

35. The heterodimeric antibody according to any one of claims 29-33, wherein the first variable heavy VH1 domain of the anti-MICA/B scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker.

36. The heterodimeric antibody according to any one of claims 21-35, wherein the scFv linker is a charged scFv linker.

37. The heterodimeric antibody according to claim 36, wherein the scFv linker is a charged scFv linker having the amino acid sequence $(GKPGS)_4$ (SEQ ID NO: XXX).

38. The heterodimeric antibody according to any one of claims 21-37, wherein the first and second Fc domains are each variant Fc domains.

39. The heterodimeric antibody according to claim 38, wherein the first and/or second variant Fc domains comprise one or more FcγRIIIA (CD16a) binding variant substitutions.

40. The heterodimeric antibody according to claim 39, wherein the one or more FcγRIIIA (CD16a) binding variant substitutions are selected from the group consisting of: (i) 236A, (ii) 239D, (iii) 239E, (iv) 243L, (v) 298A, (vi) 299T, (vii) 332E, (viii) 332D, (ix) 239D/332E, (x) 236A/332E, (xi) 239D/332E/330L, and (xii) 332E/330L, wherein numbering is according to EU numbering.

41. The heterodimeric antibody according to claim 39 or 40, wherein the first and second variant Fc domains comprise a set of FcγRIIIA (CD16a) binding variant substitutions selected from the group consisting of: (i) S239D/I332E : S239D/I332E, (ii) S239D : S239D, (iii) I332E : I332E, (iv) WT : S239D/I332E, (v) WT : S239D, (vi) WT : I332E, (vii) S239D/I332E : WT, (viii) S239D : WT, (ix) I332E : WT, (x) S239D/I332E : S239D, (xi) S239D/I332E : I332E, (xii) S239D : S239D/I332E, (xiii) I332E : S239D/I332E, (xiv) S239D : I332E, and (xv) I332E : S239D, wherein numbering is according to EU numbering.

42. The heterodimeric antibody according to any one of claims 39-41, wherein the first and/or second variant Fc domains comprise the FcγRIIIA (CD16a) binding variant substitutions of S239D/I332E, wherein numbering is according to EU numbering.

43. The heterodimeric antibody according to any one of claims 38-42, wherein the first and second variant Fc domains comprise a set of heterodimerization variants selected from the group consisting of those depicted in Figures 4A-4F, wherein numbering is according to EU numbering.

44. The heterodimeric antibody according to claim 43, wherein the set of heterodimerization variants is selected from the group consisting of: (i) S364K/E357Q : L368D/K370S, (ii) S364K : L368D/K370S, (iii) S364K : L368E/K370S, (iv) D401K : T411E/K360E/Q362E, and (v) T366W : T366S/L368A/Y407V, wherein numbering is according to EU numbering.

45. The heterodimeric antibody according to any one of claims 38-44, wherein the first and second variant Fc domains further comprise one or more ablation variants.

46. The heterodimeric antibody according to claim 45, wherein the one or more ablation variants are E233P/L234V/L235A/G236del/S267K, wherein numbering is according to EU numbering.

47. The heterodimeric antibody according to any one of claims 21-46, wherein one of the first or second variant Fc domain comprises one or more pI variants.

48. The heterodimeric antibody according to claim 47, wherein the one or more pI variants are N208D/Q295E/N384D/Q418E/N421D, wherein numbering is according to EU numbering.

49. The heterodimeric antibody according to any one of claims 21-48, wherein the first monomer comprises amino acid variants S364K/E357Q/E233P/L234V/L235A/G236del/S267K, wherein the second monomer comprises amino acid variants L368D/K370S/N208D/Q295E/N384D/Q418E/N421D/E233P/L234V/L235A/G236del/S267K, and wherein numbering is according to EU numbering.

50. The heterodimeric antibody according to any one of claims 21-49, wherein the first and second monomers each further comprise amino acid variants M428L/N434S, M428L/434A, or M252Y/S254T/T256E, wherein numbering is according to EU numbering.

51. A nucleic acid composition comprising nucleic acids encoding the first and second monomers and the light chain of the antibody according to any one of claims 21-50.

52. An expression vector comprising the nucleic acids according to claim 51.

53. A host cell transformed with an expression vector according to claim 52.

54. A method of making a heterodimeric antibody comprising:

(a) culturing the host cell according to claim 53 under conditions wherein the heterodimeric antibody is expressed; and

(b) recovering the heterodimeric antibody.

55. A heterodimeric antibody, comprising:

(a) a first monomer comprising, from N-terminus to C-terminus, a VH1-CH1-[first optional domain linker]-scFv-[second optional domain linker]-CH2-CH3, wherein VH1 is a first variable heavy VH1 domain, scFv is an anti-MICA/B scFv, and CH2-CH3 is a first Fc domain;

(b) a second monomer comprising, from N-terminus to C-terminus, a CH2-CH3, wherein the CH2-CH3 is a second Fc domain; and

(c) a light chain comprising, from N-terminus to C-terminus, a VL1-CL, wherein VL1 is a first variable light VH1 domain and CL is a constant light domain,

wherein: (i) the first variable heavy VH1 domain and the first variable light VL1 domain form a NKp46 antigen binding domain, (ii) the anti-MICA/B scFv comprises a second variable heavy VH2 domain, a scFv linker, and a second variable light VL2 domain, and (iii) the anti-MICA/B scFv is covalently attached between the C-terminus of the CH1 domain and the N-terminus of the first Fc domain.

56. The heterodimeric antibody according to claim 55, wherein the NKp46 antigen binding domain comprises a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

57. The heterodimeric antibody according to claim 55 or 56, wherein the NKp46 antigen binding domain comprises a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

58. The heterodimeric antibody according to any one of claims 55-57, wherein the anti-MICA/B scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3

and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7

[MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for

vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ

ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

59. The heterodimeric antibody according to any one of claims 55-58, wherein the anti-MICA/B scFv comprises a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and

XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for

D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

60. The heterodimeric antibody according to any one of claims 55-59, wherein:

(i) the anti-MICA/B scFv comprises, from N-terminus to C-terminus, VH2-scFv linker-VL2;

(ii) the variable heavy domain is covalently attached to the C-terminus of the CH1 domain, optionally using a first domain linker; and

(iii) the variable light domain is covalently attached to the N-terminus of the first Fc domain, optionally using a second domain linker.

61. The heterodimeric antibody according to any one of claims 55-59, wherein:

(i) the anti-MICA/B scFv comprises, from N-terminus to C-terminus, VL2-scFv linker-VH2;

(ii) the variable light domain is covalently attached to the C-terminus of the CH1 domain, optionally using a first domain linker; and

(iii) the variable heavy domain is covalently attached to the N-terminus of the first Fc

domain, optionally using a second domain linker.

62. The heterodimeric antibody according to any one of claims 55-61 selected from the group consisting of: (i) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP47274, and (ii) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP47281, as depicted in Figure 32.

63. A heterodimeric antibody, comprising:

(a) a first monomer comprising, from N-terminus to C-terminus, a VH1-CH1-[first optional domain linker]-scFv-[second optional domain linker]-CH2-CH3, wherein VH1 is a first variable heavy VH1 domain, scFv is an anti-NKp46 scFv, and CH2-CH3 is a first Fc domain;

(b) a second monomer comprising, from N-terminus to C-terminus, a CH2-CH3, wherein the CH2-CH3 is a second Fc domain; and

(c) a light chain comprising, from N-terminus to C-terminus, a VL1-CL, wherein VL1 is a first variable light VH1 domain and CL is a constant light domain,

wherein: (i) the first variable heavy VH1 domain and the first variable light VL1 domain form a MICA/B antigen binding domain, (ii) the anti-NKp46 scFv comprises a second variable heavy VH2 domain, a scFv linker, and a second variable light VL2 domain, and (iii) the anti-NKp46 scFv is covalently attached between the C-terminus of the CH1 domain and the N-terminus of the first Fc domain.

64. The heterodimeric antibody according to claim 63, wherein the MICA/B antigen binding domain comprises a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3

and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID

NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2

[MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9

[MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

65. The heterodimeric antibody according to claim 63 or 64, wherein the MICA/B antigen binding domain comprises a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID

Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for

D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

66. The heterodimeric antibody according to any one of claims 63-65, wherein the anti-NKp46 scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

67. The heterodimeric antibody according to any one of claims 63-66, wherein the anti-NKp46 scFv comprises a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

68. The heterodimeric antibody according to any one of claims 63-67, wherein:

(i) the anti-NKp46 scFv comprises, from N-terminus to C-terminus, VH2-scFv linker-VL2;

(ii) the variable heavy domain is covalently attached to the C-terminus of the CH1 domain, optionally using a first domain linker; and

(iii) the variable light domain is covalently attached to the N-terminus of the first Fc domain, optionally using a second domain linker.

69. The heterodimeric antibody according to any one of claims 63-67, wherein:

(i) the anti-NKp46 scFv comprises, from N-terminus to C-terminus, VL2-scFv linker-VH2;

(ii) the variable light domain is covalently attached to the C-terminus of the CH1 domain, optionally using a first domain linker; and

(iii) the variable heavy domain is covalently attached to the N-terminus of the first Fc domain, optionally using a second domain linker.

70. The heterodimeric antibody according to any one of claims 55-69, wherein the scFv linker is a charged scFv linker.

71. The heterodimeric antibody according to claim 70, wherein the scFv linker is a charged scFv linker having the amino acid sequence $(GKPGS)_4$ (SEQ ID NO: XXX).

72. The heterodimeric antibody according to any one of claims 55-71, wherein the first and second Fc domains are each variant Fc domains.

73. The heterodimeric antibody according to claim 72, wherein the first and/or second variant Fc domains comprise one or more FcγRIIIA (CD16a) binding variant substitutions.

74. The heterodimeric antibody according to claim 73, wherein the one or more FcγRIIIA (CD16a) binding variant substitutions are selected from the group consisting of: (i) 236A, (ii) 239D, (iii) 239E, (iv) 243L, (v) 298A, (vi) 299T, (vii) 332E, (viii) 332D, (ix) 239D/332E, (x) 236A/332E, (xi) 239D/332E/330L, and (xii) 332E/330L, wherein numbering is according to EU numbering.

75. The heterodimeric antibody according to claim 73 or 74, wherein the first and second variant Fc domains comprise a set of FcγRIIIA (CD16a) binding variant substitutions selected from the group consisting of: (i) S239D/I332E : S239D/I332E, (ii) S239D : S239D, (iii) I332E : I332E,

(iv) WT : S239D/I332E, (v) WT : S239D, (vi) WT : I332E, (vii) S239D/I332E : WT, (viii) S239D : WT, (ix) I332E : WT, (x) S239D/I332E : S239D, (xi) S239D/I332E : I332E, (xii) S239D : S239D/I332E, (xiii) I332E : S239D/I332E, (xiv) S239D : I332E, and (xv) I332E : S239D, wherein numbering is according to EU numbering.

76. The heterodimeric antibody according to any one of claims 73-75, wherein the first and/or second variant Fc domains comprise the FcγRIIIA (CD16a) binding variant substitutions of S239D/I332E, wherein numbering is according to EU numbering.

77. The heterodimeric antibody according to any one of claims 72-76, wherein the first and second variant Fc domains comprise a set of heterodimerization variants selected from the group consisting of those depicted in Figures 4A-4F, wherein numbering is according to EU numbering.

78. The heterodimeric antibody according to claim 77, wherein the set of heterodimerization variants is selected from the group consisting of: (i) S364K/E357Q : L368D/K370S, (ii) S364K : L368D/K370S, (iii) S364K : L368E/K370S, (iv) D401K : T411E/K360E/Q362E, and (v) T366W : T366S/L368A/Y407V, wherein numbering is according to EU numbering.

79. The heterodimeric antibody according to any one of claims 72-78, wherein the first and second variant Fc domains further comprise one or more ablation variants.

80. The heterodimeric antibody according to claim 79, wherein the one or more ablation variants are E233P/L234V/L235A/G236del/S267K, wherein numbering is according to EU numbering.

81. The heterodimeric antibody according to any one of claims 55-80, wherein one of the first or second variant Fc domain comprises one or more pI variants.

82. The heterodimeric antibody according to claim 81, wherein the one or more pI variants are N208D/Q295E/N384D/Q418E/N421D, wherein numbering is according to EU numbering.

83. The heterodimeric antibody according to any one of claims 55-82, wherein the first monomer comprises amino acid variants S364K/E357Q/E233P/L234V/L235A/G236del/S267K, wherein the second monomer comprises amino acid variants

L368D/K370S/N208D/Q295E/N384D/Q418E/N421D/E233P/L234V/L235A/G236del/S267K, and wherein numbering is according to EU numbering.

84. The heterodimeric antibody according to any one of claims 55-83, wherein the first and second monomers each further comprise amino acid variants M428L/N434S, M428L/434A, or M252Y/S254T/T256E, wherein numbering is according to EU numbering.

85. A nucleic acid composition comprising nucleic acids encoding the first and second monomers and the light chain of the antibody according to any one of claims 55-84.

86. An expression vector comprising the nucleic acids according to claim 85.

87. A host cell transformed with an expression vector according to claim 86.

88. A method of making a heterodimeric antibody comprising:

(a) culturing the host cell according to claim 87 under conditions wherein the heterodimeric antibody is expressed; and

(b) recovering the heterodimeric antibody.

89. A heterodimeric antibody, comprising:

(a) a first monomer comprising, from N-terminus to C-terminus, a VH1-CH1-first linker-scFv-second linker-CH2-CH3, wherein the VH1 is a first variable heavy domain, the scFv is an anti-NKp46 scFv, and the CH2-CH3 is a first Fc domain;

(b) a second monomer comprising, from N-terminus to C-terminus, a VH2-CH1-hinge-CH2-CH3, wherein the VH2 is a second variable heavy domain and the CH2-CH3 is a second Fc domain; and

(c) a common light chain comprising, from N-terminus to C-terminus, a VL-CL, wherein the VL is a variable light domain, and the CL is a light chain constant domain,

wherein the first variable heavy VH1 domain and the variable light VL domain form a first MICA/B antigen binding domain, and the second variably heavy VH2 domain and

the variable light VL domain form a second MICA/B antigen binding domain.

90. The heterodimeric antibody according to claim 89, wherein the first and/or second MICA/B antigen binding domains comprise a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for

vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID

NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12

[MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

91. The heterodimeric antibody according to claim 89 or 90, wherein the first and/or second MICA/B antigen binding domains comprise a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX

and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for

D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

92. The heterodimeric antibody according to any one of claims 89-91, wherein the anti-NKp46 scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a first variable heavy VH1 domain and a first variable light VL1 domain pair selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

93. The heterodimeric antibody according to any one of claims 89-92, wherein the anti-NKp46

scFv comprises a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

94. The heterodimeric antibody according to any one of claims 89-93, wherein the variable light domain of the anti-NKp46 scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker.

95. The heterodimeric antibody according to any one of claims 89-93, wherein the variable heavy domain of the anti-NKp46 scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker.

96. The heterodimeric antibody according to any one of claims 89-95 selected from the group consisting of: (i) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP47438, and (ii) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP47439, as depicted in Figure 33.

97. A heterodimeric antibody, comprising:

(a) a first monomer comprising, from N-terminus to C-terminus, a VH1-CH1-first linker-scFv-second linker-CH2-CH3, wherein the VH1 is a first variable heavy domain, the scFv is an anti-MICA/B scFv, and the CH2-CH3 is a first Fc domain;

(b) a second monomer comprising, from N-terminus to C-terminus, a VH2-CH1-hinge-CH2-CH3, wherein the VH2 is a second variable heavy domain and the CH2-CH3 is a second Fc domain; and

(c) a common light chain comprising, from N-terminus to C-terminus, a VL-CL, wherein the VL is a variable light domain, and the CL is a light chain constant domain,

wherein the first variable heavy VH1 domain and the variable light VL domain form a first NKp46 antigen binding domain, and the second variably heavy VH2 domain and the variable light VL domain form a second NKp46 antigen binding domain.

98. The heterodimeric antibody according to claim 97, wherein the first and/or second NKp46

antigen binding domains comprise a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

99. The heterodimeric antibody according to claim 97 or 98, wherein the first and/or second NKp46 antigen binding domains comprise a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

100. The heterodimeric antibody according to any one of claims 97-99, wherein the anti-MICA/B scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a first variable heavy VH1 domain and a first variable light VL1 domain pair selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID

NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID

NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8

[MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

101. The heterodimeric antibody according to any one of claims 97-100, wherein the anti-MICA/B scFv comprises a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos:

XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1,

(xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5

[MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

102. The heterodimeric antibody according to any one of claims 97-101, wherein the variable light domain of the anti-MICA/B scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker.

103. The heterodimeric antibody according to any one of claims 97-101, wherein the variable heavy domain of the anti-MICA/B scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker.

104. The heterodimeric antibody according to any one of claims 89-103, wherein the scFv linker is a charged scFv linker.

105. The heterodimeric antibody according to claim 104, wherein the scFv linker is a charged linker having the amino acid sequence $(GKPGS)_4$ (SEQ ID NO: XXX).

106. The heterodimeric antibody according to any one of claims 89-105, wherein the first and second Fc domains are each variant Fc domains.

107. The heterodimeric antibody according to claim 106, wherein the first and/or second variant Fc domains comprise one or more FcγRIIIA (CD16a) binding variant substitutions.

108. The heterodimeric antibody according to claim 107, wherein the one or more FcγRIIIA (CD16a) binding variant substitutions are selected from the group consisting of: (i) 236A, (ii) 239D, (iii) 239E, (iv) 243L, (v) 298A, (vi) 299T, (vii) 332E, (viii) 332D, (ix) 239D/332E, (x) 236A/332E, (xi) 239D/332E/330L, and (xii) 332E/330L, wherein numbering is according to EU numbering.

109. The heterodimeric antibody according to claim 107 or 108, wherein the first and second variant Fc domains comprise a set of FcγRIIIA (CD16a) binding variant substitutions selected from the group consisting of: (i) S239D/I332E : S239D/I332E, (ii) S239D : S239D, (iii) I332E : I332E, (iv) WT : S239D/I332E, (v) WT : S239D, (vi) WT : I332E, (vii) S239D/I332E : WT, (viii) S239D : WT, (ix) I332E : WT, (x) S239D/I332E : S239D, (xi) S239D/I332E : I332E, (xii) S239D : S239D/I332E, (xiii) I332E : S239D/I332E, (xiv) S239D : I332E, and (xv) I332E :

S239D, wherein numbering is according to EU numbering.

110. The heterodimeric antibody according to any one of claims 106-109, wherein the first and/or second variant Fc domains comprise the FcγRIIIA (CD16a) binding variant substitutions of S239D/I332E, wherein numbering is according to EU numbering.

111. The heterodimeric antibody according to any one of claims 106-110, wherein the first and second variant Fc domains comprise a set of heterodimerization variants selected from the group consisting of those depicted in Figures 4A-4F, wherein numbering is according to EU numbering.

112. The heterodimeric antibody according to claim 111, wherein the set of heterodimerization variants is selected from the group consisting of: (i) S364K/E357Q : L368D/K370S, (ii) S364K : L368D/K370S, (iii) S364K : L368E/K370S, (iv) D401K : T411E/K360E/Q362E, and (v) T366W : T366S/L368A/Y407V, wherein numbering is according to EU numbering.

113. The heterodimeric antibody according to any one of claims 106-112, wherein the first and second variant Fc domains further comprise one or more ablation variants.

114. The heterodimeric antibody according to claim 113, wherein the one or more ablation variants are E233P/L234V/L235A/G236del/S267K, wherein numbering is according to EU numbering.

115. The heterodimeric antibody according to any one of 89-114, wherein one of the first or second variant Fc domain comprises one or more pI variants.

116. The heterodimeric antibody according to claim 115, wherein the one or more pI variants are N208D/Q295E/N384D/Q418E/N421D, wherein numbering is according to EU numbering.

117. The heterodimeric antibody according to any one of claims 89-116, wherein the first monomer comprises amino acid variants S364K/E357Q/E233P/L234V/L235A/G236del/S267K, wherein the second monomer comprises amino acid variants L368D/K370S/N208D/Q295E/N384D/Q418E/N421D/E233P/L234V/L235A/G236del/S267K, and wherein numbering is according to EU numbering.

118. The heterodimeric antibody according to any one of claims 89-117, wherein the first and second monomers each further comprise amino acid variants M428L/N434S, M428L/434A, or M252Y/S254T/T256E, wherein numbering is according to EU numbering.

119. A nucleic acid composition comprising nucleic acids encoding the first and second monomers and the common light chain of the antibody according to any one of claims 89-118.

120. An expression vector comprising the nucleic acids according to claim 119.

121. A host cell transformed with an expression vector according to claim 120.

122. A method of making a heterodimeric antibody comprising:

(a) culturing the host cell according to claim 121 under conditions wherein the heterodimeric antibody is expressed; and

(b) recovering the heterodimeric antibody.

123. A heterodimeric antibody, comprising:

(a) a first monomer comprising, from N-terminus to C-terminus, a VH1-CH1-hinge-first linker-VH1-CH1-hinge-CH2-CH3, wherein VH1 is a first variable heavy domain and CH2-CH3 is a first Fc domain;

(b) a light chain comprising, from N-terminus to C-terminus, a VL1-CL, wherein VL1 is a first variable light domain and CL is a constant light domain, and wherein the VH1 and VL1 form MICA/B antigen binding domains; and

(c) a second monomer comprising, from N-terminus to C-terminus, an anti-NKp46 scFv and a second Fc domain, wherein the scFv is covalently attached to the N-terminus of the second Fc domain using a domain linker.

124. The heterodimeric antibody according to claim 123, wherein the anti-NKp46 scFv comprises a second variable heavy VH2 domain, an scFv linker, and a second variable light VL2 domain.

125. The heterodimeric antibody according to claim 123 or 124, wherein the anti-NKp46 scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

126. The heterodimeric antibody according to any one of claims 123-125, wherein the anti-NKp46 scFv comprises a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

127. The heterodimeric antibody according to any one of claims 123-126, wherein each of the MICA/B antigen binding domains comprise a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair, wherein the set of vhCDR1-3 and vlCDR1-3 is selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5

[MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX

for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID

NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

128. The heterodimeric antibody according to any one of claims 123-127, wherein each of the MICA/B antigen binding domains comprise a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and

XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii)

SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9

[MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

129. The heterodimeric antibody according to any one of claims 123-128 selected from the group consisting of: (i) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP47442, and (ii) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP47443, as depicted in Figure 34.

130. A heterodimeric antibody, comprising:

(a) a first monomer comprising, from N-terminus to C-terminus, a VH1-CH1-hinge-first linker-VH1-CH1-hinge-CH2-CH3, wherein VH1 is a first variable heavy domain and CH2-CH3 is a first Fc domain;

(b) a light chain comprising, from N-terminus to C-terminus, a VL1-CL, wherein VL1 is a first variable light domain and CL is a constant light domain, and wherein the VH1 and VL1 form NKp46 antigen binding domains; and

(c) a second monomer comprising, from N-terminus to C-terminus, an anti-MICA/B scFv and a second Fc domain, wherein the scFv is covalently attached to the N-terminus of the second Fc domain using a second linker.

131. The heterodimeric antibody according to claim 130, wherein the anti-MICA/B scFv comprises a second variable heavy VH2 domain, an scFv linker, and a second variable light VL2 domain.

132. The heterodimeric antibody according to claim 130 or 131, wherein the anti-MICA/B scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3

and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID

NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2

[MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9

[MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

133. The heterodimeric antibody according to any one of claims 130-132, wherein the anti-MICA/B scFv comprises a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID

Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for

D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

134. The heterodimeric antibody according to any one of claims 130-133, wherein each of the NKp46 antigen binding domains comprise a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair, wherein the set of vhCDR1-3 and vlCDR1-3 is selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

135. The heterodimeric antibody according to any one of claims 130-134, wherein each of the NKp46 antigen binding domains comprise a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

136. The heterodimeric antibody according to any one of claims 123-135, wherein the scFv linker is a charged scFv linker.

137. The heterodimeric antibody according to claim 136, wherein the scFv linker is a charged scFv linker having the amino acid sequence $(GKPGS)_4$ (SEQ ID NO: XXX).

138. The heterodimeric antibody according to any one of claims 123-137, wherein the first and

second linkers are each domain linkers.

139. The heterodimeric antibody according to any one of claims 123-138, wherein the first and second Fc domains are each variants Fc domains.

140. The heterodimeric antibody according to claim 139, wherein the first and/or second variant Fc domains comprise one or more FcγRIIIA (CD16a) binding variant substitutions.

141. The heterodimeric antibody according to claim 140, wherein the one or more FcγRIIIA (CD16a) binding variant substitutions are selected from the group consisting of: (i) 236A, (ii) 239D, (iii) 239E, (iv) 243L, (v) 298A, (vi) 299T, (vii) 332E, (viii) 332D, (ix) 239D/332E, (x) 236A/332E, (xi) 239D/332E/330L, and (xii) 332E/330L, wherein numbering is according to EU numbering.

142. The heterodimeric antibody according to any one of claims 139-141, wherein the first and second variant Fc domains comprise a set of FcγRIIIA (CD16a) binding variant substitutions selected from the group consisting of: (i) S239D/I332E : S239D/I332E, (ii) S239D : S239D, (iii) I332E : I332E, (iv) WT : S239D/I332E, (v) WT : S239D, (vi) WT : I332E, (vii) S239D/I332E : WT, (viii) S239D : WT, (ix) I332E : WT, (x) S239D/I332E : S239D, (xi) S239D/I332E : I332E, (xii) S239D : S239D/I332E, (xiii) I332E : S239D/I332E, (xiv) S239D : I332E, and (xv) I332E : S239D, wherein numbering is according to EU numbering.

143. The heterodimeric antibody according to any one of claims 139-142, wherein the first and/or second variant Fc domains comprise the FcγRIIIA (CD16a) binding variant substitutions of S239D/I332E, wherein numbering is according to EU numbering.

144. The heterodimeric antibody according to any one of claims 139-143, wherein the first and second variant Fc domains comprise a set of heterodimerization variants selected from the group consisting of those depicted in Figures 4A-4F, wherein numbering is according to EU numbering.

145. The heterodimeric antibody according to claim 144, wherein the set of heterodimerization variants is selected from the group consisting of: (i) S364K/E357Q : L368D/K370S, (ii) S364K : L368D/K370S, (iii) S364K : L368E/K370S, (iv) D401K : T411E/K360E/Q362E, and (v) T366W

: T366S/L368A/Y407V, wherein numbering is according to EU numbering.

146. The heterodimeric antibody according to any one of claims 139-145, wherein the first and second Fc variant domains further comprise one or more ablation variants.

147. The heterodimeric antibody according to claim 146, wherein the one or more ablation variants are E233P/L234V/L235A/G236del/S267K, wherein numbering is according to EU numbering.

148. The heterodimeric antibody according to any one of claims 123-147, wherein the first or second variant Fc domain further comprises one or more pI variants.

149. The heterodimeric antibody according to claim 148, wherein the one or more pI variants are N208D/Q295E/N384D/Q418E/N421D, wherein numbering is according to EU numbering.

150. The heterodimeric antibody according to any one of claims 123-149, wherein the first monomer comprises amino acid variants S364K/E357Q/E233P/L234V/L235A/G236del/S267K, wherein the second monomer comprises amino acid variants L368D/K370S/N208D/Q295E/N384D/Q418E/N421D/E233P/L234V/L235A/G236del/S267K, and wherein numbering is according to EU numbering.

151. The heterodimeric antibody according to any one of claims 123-150, wherein the first and second monomers each further comprise amino acid variants M428L/N434S, M428L/434A, or M252Y/S254T/T256E, wherein numbering is according to EU numbering.

152. A nucleic acid composition comprising nucleic acids encoding the first and second monomers and the light chain of the antibody according to any one of claims 123-151.

153. An expression vector comprising the nucleic acids according to claim 152.

154. A host cell transformed with an expression vector according to claim 153.

155. A method of making a heterodimeric antibody comprising:

(a) culturing the host cell according to claim 154 under conditions wherein the heterodimeric antibody is expressed; and

(b) recovering the heterodimeric antibody.

156. A heterodimeric antibody, comprising:

(a) a first monomer comprising, from N-terminus to C-terminus, a VH1-CH1-hinge-CH2-CH3-domain linker-scFv, wherein VH1 is a first variable heavy domain, scFv is an anti-NKp46 scFv, and CH2-CH3 is a first Fc domain;

(b) a second monomer comprising, from N-terminus to C-terminus, a VH2-CH1-hinge-CH2-CH3, wherein CH2-CH3 is a second Fc domain; and

(c) a light chain comprising, from N-terminus to C-terminus, a VL1-CL, wherein VL1 is a first variable light domain and CL is a constant light domain,

wherein the VH1 and the VL1 form a first MICA/B antigen binding domain, the VH2 domain and the VL1 form a second MICA/B antigen binding domain,

and the anti-NKp46 scFv comprises a VH3 domain, a scFv linker, and a VL2 domain.

157. The heterodimeric antibody according to claim 156, wherein the first and/or second MICA/B antigen binding domains comprise a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5

[MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7

[MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3

and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

158. The heterodimeric antibody according to claim 156 or 157, wherein the first and/or second MICA/B antigen binding domains comprise a variable heavy domain and variable light domain

pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and

XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ

ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

159. The heterodimeric antibody according to any one of claims 156-158, wherein the anti-NKp46 scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a first variable heavy chain VH1 domain and first variable light chain VL1 domain pair selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

160. The heterodimeric antibody according to any one of claims 156-159, wherein the anti-NKp46 scFv comprises a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

161. The heterodimeric antibody according to any one of claims 156-160, wherein the variable light domain of the anti-NKp46 scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker.

162. The heterodimeric antibody according to any one of claims 156-160, wherein the variable heavy domain of the anti-NKp46 scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker.

163. The heterodimeric antibody according to any one of claims 156-162 selected from the group consisting of: (i) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP47446, and (ii) the amino acid sequences of SEQ ID NOs: XXX-XXX of XENP47447, as depicted in Figure 35.

164. A heterodimeric antibody, comprising:

(a) a first monomer comprising, from N-terminus to C-terminus, a VH1-CH1-hinge-CH2-CH3-domain linker-scFv, wherein VH1 is a first variable heavy domain, scFv is an anti-MICA/B scFv, and CH2-CH3 is a first Fc domain;

(b) a second monomer comprising, from N-terminus to C-terminus, a VH2-CH1-hinge-CH2-CH3, wherein CH2-CH3 is a second Fc domain; and

(c) a light chain comprising, from N-terminus to C-terminus, a VL1-CL, wherein VL1 is a first variable light domain and CL is a constant light domain,

wherein the VH1 and the VL1 form a first NKp46 antigen binding domain, the VH2 domain and the VL1 form a second NKp46 antigen binding domain,

and the anti-NKp46 scFv comprises a VH3 domain, a scFv linker, and a VL2 domain.

165. The heterodimeric antibody according to claim 164, wherein the first and/or second NKp46 antigen binding domains comprise a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

166. The heterodimeric antibody according to claim 164 or 165, wherein the first and/or second NKp46 antigen binding domains comprise a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for 2C10A3.372[NKp46]_H1_2C10A3.372[NKp46]_L1, and (ii) SEQ ID Nos: XXX and XXX for NKp46-A[NKp46]_H_ NKp46-A[NKp46]_L, as depicted in Figures 23 and 24.

167. The heterodimeric antibody according to any one of claims 164-166, wherein the anti-MICA/B scFv comprises a set of vhCDR1-3 and vlCDR1-3 from a first variable heavy chain VH1 domain and first variable light chain VL1 domain pair selected from the group consisting of: (i) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID NOs: XXX-XXX

for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2F7

[MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID NOs: XXX-XXX for vhCDR1-3

and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D8 [MICA/B]_H0_D94837_1D8 [MICA/B]_L0, (xlviii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ

ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID NOs: XXX-XXX for vhCDR1-3 and SEQ ID NOs: XXX-XXX for vlCDR1-3 of 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

168. The heterodimeric antibody according to any one of claims 164-167, wherein the anti-MICA/B scFv comprises a variable heavy domain and variable light domain pair selected from the group consisting of: (i) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H0_D94837_1E11_1 [MICA/B]_L0, (ii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L1, (iii) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H1_D94837_1E11_1 [MICA/B]_L2, (iv) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L1, (v) SEQ ID Nos: XXX and XXX for D94837_1E11_1 [MICA/B]_H2_D94837_1E11_1 [MICA/B]_L2, (vi) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H0_2E5 [MICA/B]_L0, (vii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L1, (viii) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H1_2E5 [MICA/B]_L2, (ix) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L1, (x) SEQ ID Nos: XXX and XXX for 2E5 [MICA/B]_H2_2E5 [MICA/B]_L2, (xi) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H0_D94852_2E12 [MICA/B]_L0, (xii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L1, (xiii) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H1_D94852_2E12 [MICA/B]_L2, (xiv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L1, (xv) SEQ ID Nos: XXX and XXX for D94852_2E12 [MICA/B]_H2_D94852_2E12 [MICA/B]_L2, (xvi) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H0_D99136_2F7 [MICA/B]_L0, (xvii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L1, (xviii) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H1_D99136_2F7 [MICA/B]_L2, (xix) SEQ ID Nos: XXX and XXX for D99136_2F7 [MICA/B]_H2_D99136_2F7 [MICA/B]_L1, (xx) SEQ ID Nos: XXX and XXX for D99136_2F7

[MICA/B]_H2_D99136_2F7 [MICA/B]_L2, (xxi) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H0_D103388_1C7 [MICA/B]_L0, (xxii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L1, (xxiii) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H1_D103388_1C7 [MICA/B]_L2, (xxiv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L1, (xxv) SEQ ID Nos: XXX and XXX for D103388_1C7 [MICA/B]_H2_D103388_1C7 [MICA/B]_L2, (xxvi) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H0_D103388_1D7 [MICA/B]_L0, (xxvii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L1, (xxviii) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H1_D103388_1D7 [MICA/B]_L2, (xxix) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L1, (xxx) SEQ ID Nos: XXX and XXX for D103388_1D7 [MICA/B]_H2_D103388_1D7 [MICA/B]_L2, (xxxi) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H0_D105317_1A2 [MICA/B]_L0, (xxxii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L1, (xxxiii) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H1_D105317_1A2 [MICA/B]_L2, (xxxiv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L1, (xxxv) SEQ ID Nos: XXX and XXX for D105317_1A2 [MICA/B]_H2_D105317_1A2 [MICA/B]_L2, (xxxvi) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H0_D99136_2C11 [MICA/B]_L0, (xxxvii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L1, (xxxviii) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H1_D99136_2C11 [MICA/B]_L2, (xxxix) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L1, (xl) SEQ ID Nos: XXX and XXX for D99136_2C11 [MICA/B]_H2_D99136_2C11 [MICA/B]_L2, (xli) SEQ ID Nos: XXX and XXX for D103388_1B11-2 [MICA/B]_H0_D103388_1B11-2 [MICA/B]_L0, (xlii) SEQ ID Nos: XXX and XXX for D105317_1B6 [MICA/B]_H0_D105317_1B6 [MICA/B]_L0, (xliii) SEQ ID Nos: XXX and XXX for D105317_1C8 [MICA/B]_H0_D105317_1C8 [MICA/B]_L0, (xliv) SEQ ID Nos: XXX and XXX for D105317_1F6 [MICA/B]_H0_D105317_1F6 [MICA/B]_L0, (xlv) SEQ ID Nos: XXX and XXX for D105317_1F7 [MICA/B]_H0_D105317_1F7 [MICA/B]_L0, (xlvi) SEQ ID Nos: XXX and XXX for D94837_1D3 [MICA/B]_H0_D94837_1D3 [MICA/B]_L0, (xlvii) SEQ ID Nos: XXX and XXX for D94837_1D8 [MICA/B]_H0_D94837_1D8

[MICA/B]_L0, (xlviii) SEQ ID Nos: XXX and XXX for D94837_1D9 [MICA/B]_H0_D94837_1D9 [MICA/B]_L0, (xlix) SEQ ID Nos: XXX and XXX for D94837_1E1 [MICA/B]_H0_D94837_1E1 [MICA/B]_L0, (l) SEQ ID Nos: XXX and XXX for D94852_2D4 [MICA/B]_H0_D94852_2D4 [MICA/B]_L0, (li) SEQ ID Nos: XXX and XXX for D94852_2G8 [MICA/B]_H0_D94852_2G8 [MICA/B]_L0, (lii) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (liii) SEQ ID Nos: XXX and XXX for D94837_3B12 [MICA/B]_H0_D94837_3B12 [MICA/B]_L0, (liv) SEQ ID Nos: XXX and XXX for D99122_1H7 [MICA/B]_H0_D99122_1H7 [MICA/B]_L0, (lv) SEQ ID Nos: XXX and XXX for D99136_2E8 [MICA/B]_H0_D99136_2E8 [MICA/B]_L0, (lvi) SEQ ID Nos: XXX and XXX for D88487_2A8 [MICA/B]_H0_D88487_2A8 [MICA/B]_L0, (lvii) SEQ ID Nos: XXX and XXX for 3F9[MICA/B]_H0_3F9[MICA/B]_L0, (lviii) SEQ ID Nos: XXX and XXX for 6E1[MICA/B]_H0_6E1[MICA/B]_L0, (lix) SEQ ID Nos: XXX and XXX for 7C6[MICA/B]_H0_7C6[MICA/B]_L0, (lx) SEQ ID Nos: XXX and XXX for 13A9 [MICA/B]_H0_13A9 [MICA/B]_L0, and (lxi) SEQ ID Nos: XXX and XXX for 1D5 [MICA/B]_H0_1D5 [MICA/B]_L0, as depicted in Figures 21 and 22.

169. The heterodimeric antibody according to any one of claims 164-168, wherein the variable light domain of the anti-MICA/B scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker.

170. The heterodimeric antibody according to any one of claims 164-168, wherein the variable heavy domain of the anti-MICA/B scFv is covalently attached to the N-terminus of the first Fc domain using a domain linker.

171. The heterodimeric antibody according to any one of claims 156-170, wherein the scFv linker is a charged scFv linker.

172. The heterodimeric antibody according to claim 171, wherein the scFv linker is a charged linker having the amino acid sequence $(GKPGS)_4$ (SEQ ID NO: XXX).

173. The heterodimeric antibody according to any one of claims 156-172, wherein the first and second Fc domains are each variant Fc domains.

174. The heterodimeric antibody according to claim 173, wherein the first and/or second variant

Fc domains comprise one or more FcγRIIIA (CD16a) binding variant substitutions.

175. The heterodimeric antibody according to claim 174, wherein the one or more FcγRIIIA (CD16a) binding variant substitutions are selected from the group consisting of: (i) 236A, (ii) 239D, (iii) 239E, (iv) 243L, (v) 298A, (vi) 299T, (vii) 332E, (viii) 332D, (ix) 239D/332E, (x) 236A/332E, (xi) 239D/332E/330L, and (xii) 332E/330L, wherein numbering is according to EU numbering.

176. The heterodimeric antibody according to claim 174 or 175, wherein the first and second variant Fc domains comprise a set of FcγRIIIA (CD16a) binding variant substitutions selected from the group consisting of: (i) S239D/I332E : S239D/I332E, (ii) S239D : S239D, (iii) I332E : I332E, (iv) WT : S239D/I332E, (v) WT : S239D, (vi) WT : I332E, (vii) S239D/I332E : WT, (viii) S239D : WT, (ix) I332E : WT, (x) S239D/I332E : S239D, (xi) S239D/I332E : I332E, (xii) S239D : S239D/I332E, (xiii) I332E : S239D/I332E, (xiv) S239D : I332E, and (xv) I332E : S239D, wherein numbering is according to EU numbering.

177. The heterodimeric antibody according to any one of claims 174-176, wherein the first and/or second variant Fc domains comprise the FcγRIIIA (CD16a) binding variant substitutions of S239D/I332E, wherein numbering is according to EU numbering.

178. The heterodimeric antibody according to any one of claims 173-177, wherein the first and second variant Fc domains comprise a set of heterodimerization variants selected from the group consisting of those depicted in Figures 4A-4F, wherein numbering is according to EU numbering.

179. The heterodimeric antibody according to claim 178, wherein the set of heterodimerization variants is selected from the group consisting of: (i) S364K/E357Q : L368D/K370S, (ii) S364K : L368D/K370S, (iii) S364K : L368E/K370S, (iv) D401K : T411E/K360E/Q362E, and (v) T366W : T366S/L368A/Y407V, wherein numbering is according to EU numbering.

180. The heterodimeric antibody according to any one of claims 173-179, wherein the first and second variant Fc domains further comprise one or more ablation variants.

181. The heterodimeric antibody according to claim 180, wherein the one or more ablation

variants are E233P/L234V/L235A/G236del/S267K, wherein numbering is according to EU numbering.

182. The heterodimeric antibody according to any one of claims 156-181, wherein one of the first or second variant Fc domain comprises one or more pI variants.

183. The heterodimeric antibody according to claim 182, wherein the one or more pI variants are N208D/Q295E/N384D/Q418E/N421D, wherein numbering is according to EU numbering.

184. The heterodimeric antibody according to any one of claims 156-183, wherein the first monomer comprises amino acid variants S364K/E357Q/E233P/L234V/L235A/G236del/S267K, wherein the second monomer comprises amino acid variants L368D/K370S/N208D/Q295E/N384D/Q418E/N421D/E233P/L234V/L235A/G236del/S267K, and wherein numbering is according to EU numbering.

185. The heterodimeric antibody according to any one of claims 156-184, wherein the first and second monomers each further comprise amino acid variants M428L/N434S, M428L/434A, or M252Y/S254T/T256E, wherein numbering is according to EU numbering.

186. A nucleic acid composition comprising nucleic acids encoding the first and second monomers and the light chain of the antibody according to any one of claims 156-185.

187. An expression vector comprising the nucleic acids according to claim 186.

188. A host cell transformed with an expression vector according to claim 187.

189. A method of making a heterodimeric antibody comprising:

(a) culturing the host cell according to claim 188 under conditions wherein the heterodimeric antibody is expressed; and

(b) recovering the heterodimeric antibody.

Fig. 1

Human MICA*001 sequence (SEQ ID NO: XXX)

>sp|Q29983|MICA_HUMAN MHC class I polypeptide-related sequence A OS=Homo sapiens OX=9606 GN=MICA PE=1 SV=1

MGLGPVFLLLAGIFPFAPPGAAAEPHSLRYNLTVLSWDGSVQSGFLTEVHLDGQPFLRCDRQKCRAKPQGQWAED
VLGNKTWDRETRDLTGNGKDLRMTLAHIKDQKEGLHSLQEIRVCEIHEDNSTRSSQHFYYDGELFLSQNLETKEW
TMPQSSRAQTLAMNVRNFLKEDAMKTKTHYHAMHADCLQELRRYLKSGVVLRRTVPPMVNVTRSEASEGNITVTC
RASGFYPWNITLSWRQDGVSLSHDTQQWGDVLPDGNGTYQTWVATRICQGEEQRFTCYMEHSGNHSTHPVPSGKV
LVLQSHWQTFHVSAVAAAAIFVIIIFYVRCCKKKTSAAEGPELVSLQVLDQHPVGTSDHRDATQLGFQPLMSDLG
STGSTEGA

Human MICA*001, extracellular domain (SEQ ID NO: XXX)

>sp|Q29983|24-307

EPHSLRYNLTVLSWDGSVQSGFLTEVHLDGQPFLRCDRQKCRAKPQGQWAEDVLGNKTWDRETRDLTGNGKDLRM
TLAHIKDQKEGLHSLQEIRVCEIHEDNSTRSSQHFYYDGELFLSQNLETKEWTMPQSSRAQTLAMNVRNFLKEDA
MKTKTHYHAMHADCLQELRRYLKSGVVLRRTVPPMVNVTRSEASEGNITVTCRASGFYPWNITLSWRQDGVSLSH
DTQQWGDVLPDGNGTYQTWVATRICQGEEQRFTCYMEHSGNHSTHPVPSGKVLVLQSHW

Cynomolgus MICA*001 sequence (SEQ ID NO: XXX)

>UJY53392.1 MHC class I polypeptide-related sequence A [Macaca fascicularis]

MGPGRVLLFLASMFPFARPGAAAELHSLRYNVTVLSRDGSVQSEFLAEGHLDSQLFVRYDRETRRARPQGQWAEA
VLGAKTWDTETGDLTENGKDLRRTLTHIEGQKGGLHSLQDIQNCEIYEDGSTGGSRHFYYDGERFLSLNLATQEW
TVAQSSRAQTLAMNFWKEDTMKTNTHYHAMQADCLKKLRRYQKSRVAVRRTAPPMVNVTHSEASEGNITVTCRAS
GFYPRNIALTWRQDGVSLNHDAQRWGGILPDQNGTYQTWVATRIRQGEEQRFACYMEHSGNHSTHTVPSGKVLVF
QSQWLDIPYVLGVAAAAVAAAAAIFVIILYVLCCKKKTSAAEGPELVSLRTLDQHPVGTGDHRDAT

Human MICA*002, extracellular domain (SEQ ID NO: XXX)

AEPHSLRYNLTVLSGDGSVQSGFLAEVHLDGQPFLRCDRQKCRAKPQGQWAEDVLGNKTWDRETRDLTGNGKDLR
MTLAHIKDQKEGLHSLQEIRVCEIHEDNSTRSSQHFYYDGELFLSQNLETEEWTMPQSSRAQTLAMNVRNFLKED
AMKTKTHYHAMHADCLQELRRYLKSGVVLRRTVPPMVNVTRSEASEGNITVTCRASGFYPWNITLSWRQDGVSLS
HDTQQWGDVLPDGNGTYQTWVATRICQGEEQRFTCYMEHSGNHSTHPVPSGKVLVLQSHWQ

Human MICA*004, extracellular domain (SEQ ID NO: XXX)

AEPHSLRYNLTVLSWDGSVQSGFLAEVHLDGQPFLRYDRQKCRAKPQGQWAEDVLGNKTWDRETRDLTGNGKDLR
MTLAHIKDQKEGLHSLQEIRVCEIHEDNSTRSSQHFYYDGELFLSQNVETEEWTVPQSSRAQTLAMNVRNFLKED
AMKTKTHYHAMHADCLQELRRYLESSVVLRRRVPPMVNVTRSEASEGNITVTCRASSFYPRNITLTWRQDGVSLS
HDTQQWGDVLPDGNGTYQTWVATRICQGEEQRFTCYMEHSGNHSTHPVPSGKVLVLQSHWQ

Human MICA*008, extracellular domain (SEQ ID NO: XXX)

AEPHSLRYNLTVLSWDGSVQSGFLAEVHLDGQPFLRYDRQKCRAKPQGQWAEDVLGNKTWDRETRDLTGNGKDLR
MTLAHIKDQKEGLHSLQEIRVCEIHEDNSTRSSQHFYYDGELFLSQNLETEEWTVPQSSRAQTLAMNVRNFLKED
AMKTKTHYHAMHADCLQELRRYLESGVVLRRTVPPMVNVTRSEASEGNITVTCRASSFYPRNIILTWRQDGVSLS
HDTQQWGDVLPDGNGTYQTWVATRICRGEEQRFTCYMEHSGNHSTHPVPSGKVLVLQSHWQ

Fig. 2

Human MICB*004 sequence (SEQ ID NO: XXX)

>sp|Q29980|MICB_HUMAN MHC class I polypeptide-related sequence B OS=Homo sapiens OX=9606 GN=MICB PE=1 SV=2
MGLGRVLLFLAVAFPFAPPAAAAEPHSLRYNLMVLSQDGSVQSGFLAEGHLDGQPFLRYDRQKRRAKPQGQWAEN
VLGAKTWDTETEDLTENGQDLRRTLTHIKDQKGGLHSLQEIRVCEIHEDSSTRGSRHFYYDGELFLSQNLETQES
TVPQSSRAQTLAMNVTNFWKEDAMKTKTHYRAMQADCLQKLQRYLKSGVAIRRTVPPMVNVTCSEVSEGNITVTC
RASSFYPRNITLTWRQDGVSLSHNTQQWGDVLPDGNGTYQTWVATRIRQGEEQRFTCYMEHSGNHGTHPVPSGKA
LVLQSQRTDFPYVSAAMPCFVIIIILCVPCCKKKTSAAEGPELVSLQVLDQHPVGTGDHRDAAQLGFQPLMSATG
STGSTEGT

Human MICB*004, extracellular domain (SEQ ID NO: XXX)

>sp|Q29980|23-309
AEPHSLRYNLMVLSQDGSVQSGFLAEGHLDGQPFLRYDRQKRRAKPQGQWAENVLGAKTWDTETEDLTENGQDLR
RTLTHIKDQKGGLHSLQEIRVCEIHEDSSTRGSRHFYYDGELFLSQNLETQESTVPQSSRAQTLAMNVTNFWKED
AMKTKTHYRAMQADCLQKLQRYLKSGVAIRRTVPPMVNVTCSEVSEGNITVTCRASSFYPRNITLTWRQDGVSLS
HNTQQWGDVLPDGNGTYQTWVATRIRQGEEQRFTCYMEHSGNHGTHPVPSGKALVLQSQRTD

Cynomolgus MICB*004 sequence (SEQ ID NO: XXX)

>UJY53393.1 MHC class I polypeptide-related sequence B [Macaca fascicularis]
MGLGRVLLFLGRVLLFLASIFSFTRPGAAAELHSLRYNVTVLSRDGSVQSGFLAEGHLDGQLFVRYDRETRRARP
QGQWAEAVLGDQETEDLTENAQDLRRTLTHIEGQKGGLHSLQKIKICEIYEDGSTGGFWHFYYDGELFLSLNLET
QKWTVAQSSRAQTLAMSFWKEDTMKTNTHYRAMRADCLKKLRRYQKSRVAVRRTVPPMVNVTHGEASEGNITVTC
RASGFYPGNITLTWRQDGVSLSHDAQQWGDVLPDRNGTYYTWVATRIRQGEEQKFACYMEHSGNHSTHPVPSGKP
PVLQSERLNLLYVPVAVAVVTAFIIIRVHCCKKKKTSAAEGPELVSLQTLDQHPVGTGDHRDATQLGSQPLMSAP
GSTGSTEGA

Human MICB*005, extracellular domain (SEQ ID NO: XXX)

AEPHSLRYNLMVLSQDGSVQSGFLAEGHLDGQPFLRYDRQKRRAKPQGQWAEDVLGAKTWDTETEDLTENGQDLR
RTLTHIKDQKGGLHSLQEIRVCEIHEDSSTRGSRHFYYDGELFLSQNLETQESTVPQSSRAQTLAMNVTNFWKED
AMKTKTHYRAMQADCLQKLQRYLKSGVAIRRTVPPMVNVTCSEVSEGNITVTCRASSFYPRNITLTWRQDGVSLS
HNTQQWGDVLPDGNGTYQTWVATRIRQGEEQRFTCYMEHSGNHGTHPVPSGKALVLQSQRTD

Fig. 3

Human NKp46 sequence (SEQ ID NO: XXX)

>sp|O76036|NCTR1_HUMAN Natural cytotoxicity triggering receptor 1 OS=Homo sapiens OX=9606 GN=NCR1 PE=1 SV=1

MSSTLPALLCVGLCLSQRISAQQQTLPKPFIWAEPHFMVPKEKQVTICCQGNYGAVEYQLHFEGSLFAVDRPKPP
ERINKVKFYIPDMNSRMAGQYSCIYRVGELWSEPSNLLDLVVTEMYDTPTLSVHPGPEVISGEKVTFYCRLDTAT
SMFLLLKEGRSSHVQRGYGKVQAEFPLGPVTTAHRGTYRCFGSYNNHAWSFPSEPVKLLVTGDIENTSLAPEDPT
FPADTWGTYLLTTETGLQKDHALWDHTAQNLLRMGLAFLVLVALVWFLVEDWLSRKRTRERASRASTWEGRRRLN
TQTL

Human NKp46, extracellular domain (SEQ ID NO: XXX)

>sp|O76036|NCTR1_HUMAN|22-258 Natural cytotoxicity triggering receptor 1 OS=Homo sapiens OX=9606 GN=NCR1 PE=1 SV=1

QQQTLPKPFIWAEPHFMVPKEKQVTICCQGNYGAVEYQLHFEGSLFAVDRPKPPERINKVKFYIPDMNSRMAGQY
SCIYRVGELWSEPSNLLDLVVTEMYDTPTLSVHPGPEVISGEKVTFYCRLDTATSMFLLLKEGRSSHVQRGYGKV
QAEFPLGPVTTAHRGTYRCFGSYNNHAWSFPSEPVKLLVTGDIENTSLAPEDPTFPADTWGTYLLTTETGLQKDH
ALWDHTAQNLLR

Mouse NKp46 sequence (SEQ ID NO: XXX)

>sp|Q8C567|NCTR1_MOUSE Natural cytotoxicity triggering receptor 1 OS=Mus musculus OX=10090 GN=Ncr1 PE=1 SV=2

MLPTLTALLCLGLCLSQRINTEKETLPKPIIWAKPSIMVTNGNSVNIWCQGAQSASEYQLYFEGSFFALERPKPS
RSMNKVRFFISQMTSHTAGIYTCFYQSGELWSKSSNPLKLVVTGLYDTPNLWVYPRPEVTLGENVTFFCQLKTAT
SKFFLLKERGSNHIQNKYGNIQAEFPMGPVTRAHRGTYRCFGSYNDYAWSFPSEPVTLLITGGVENSSLAPTDPT
SSLDYWEFDLSTNESGLQKDSAFWDHTTQNLIRIGLACIILITLVWLLTEDWLSKRKDHEEANRLTNWECRRRWR
MQHYFEEEQRNAISMMELKATPGAL

Mouse NKp46, extracellular domain (SEQ ID NO: XXX)

>sp|Q8C567|NCTR1_MOUSE|17-255 Natural cytotoxicity triggering receptor 1 OS=Mus musculus OX=10090 GN=Ncr1 PE=1 SV=2

QRINTEKETLPKPIIWAKPSIMVTNGNSVNIWCQGAQSASEYQLYFEGSFFALERPKPSRSMNKVRFFISQMTSH
TAGIYTCFYQSGELWSKSSNPLKLVVTGLYDTPNLWVYPRPEVTLGENVTFFCQLKTATSKFFLLKERGSNHIQN
KYGNIQAEFPMGPVTRAHRGTYRCFGSYNDYAWSFPSEPVTLLITGGVENSSLAPTDPTSSLDYWEFDLSTNESG
LQKDSAFWDHTTQN

Cynomolgus NKp46 sequence (SEQ ID NO: XXX)

>sp|Q95JB9|NCTR1_MACFA Natural cytotoxicity triggering receptor 1 OS=Macaca fascicularis OX=9541 GN=NCR1 PE=2 SV=1

MSSTLRALLCLGLCLSQRISAPKQTLPKPIIRAESTYMVPKEKQATLCCQGSYGAVEYQLHFEGSLFAVERPKPP
ERINGVKFHIPDMNSRKAGRYSCIYRVGELWSERSDLLDLVVTEMYDTPTLSVHPGPEVTSGEKVTFYCRLDTAT
SMFLLLKEGRSRDVQRSYGKVQAEFPMGPVTTAHRGSYRCFGSYNNYAWSFPSEPVKLLVTGDIENTSLAPTDPT
FPDSWDTCLLTRETGLQKDLALWDHTAQNLLRMGLAFLVLVALVCLLVEDWLSRKRTREQASRASTWEGRRRLNK
HKDSEE

Cynomolgus NKp46, extracellular domain (SEQ ID NO: XXX)

>sp|Q95JB9|NCTR1_MACFA|22-257 Natural cytotoxicity triggering receptor 1 OS=Macaca fascicularis OX=9541 GN=NCR1 PE=2 SV=1

PKQTLPKPIIRAESTYMVPKEKQATLCCQGSYGAVEYQLHFEGSLFAVERPKPPERINGVKFHIPDMNSRKAGRY
SCIYRVGELWSERSDLLDLVVTEMYDTPTLSVHPGPEVTSGEKVTFYCRLDTATSMFLLLKEGRSRDVQRSYGKV
QAEFPMGPVTTAHRGSYRCFGSYNNYAWSFPSEPVKLLVTGDIENTSLAPTDPTFPDSWDTCLLTRETGLQKDLA
LWDHTAQNLLR

Fig. 4

Fig. 4A

Monomer 1	Monomer 2
F405A	T394F
S364D	Y349K
S364E	L368K
S364E	Y349K
S364F	K370G
S364H	Y349K
S364H	Y349T
S364Y	K370G
T411K	K370E
V397S/F405A	T394F
K370R/T411K	K370E/T411E
L351E/S364D	Y349K/L351K
L351E/S364E	Y349K/L351K
L351E/T366D	L351K/T366K
P395T/V397S/F405A	T394F
S364D/K370G	S364Y/K370R
S364D/T394F	Y349K/F405A
S364E/F405A	Y349K/T394F
S364E/F405S	Y349K/T394Y
S364E/T411E	Y349K/D401K
S364H/D401K	Y349T/T411E
S364H/F405A	Y349T/T394F
S364H/T394F	Y349T/F405A
Y349C/S364E	Y349K/S354C
L351E/S364D/F405A	Y349K/L351K/T394F
L351K/S364H/D401K	Y349T/L351E/T411E
S364E/T411E/F405A	Y349K/T394F/D401K
S364H/D401K/F405A	Y349T/T394F/T411E
S364H/F405A/T411E	Y349T/T394F/D401K

Fig. 4B

Monomer 1	Monomer 2
K370E/T411D	T411K
L368E/K409E	L368K
Y349T/T394F/S354C	S364H/F405A/Y349C
T411E	D401K
T411E	D401R/T411R
Q347E/K360E	Q347R
L368E	S364K
L368E/K370S	S364K
L368E/K370T	S364K
L368E/D401R	S364K
L368E/D401N	S364K
L368E	E357S/S364K
L368E	S364K/K409E
L368E	S364K/K409V
L368D	S364K
L368D/K370S	S364K
L368D/K370S	S364K/E357L
L368D/K370S	S364K/E357Q
T411E/K360E/Q362E	D401K
K370S	S364K
L368E/K370S	S364K/E357Q
K370S	S364K/E357Q
T411E/K360D	D401K
T411E/K360E	D401K
T411E/Q362E	D401K
T411E/N390D	D401K
T411E	D401K/Q347K
T411E	D401K/Q347R
T411E/K360D/Q362E	D401K

Fig. 4C

Monomer 1	Monomer 2
T411E/K360E/N390D	D401K
T411E/Q362E/N390D	D401K
T411E/Q347R	D401K/K360D
T411E/Q347R	D401K/K360E
T411E/K360	D401K/Q347K
T411E/K360D	D401K/Q347R
T411E/K360E	D401K/Q347K
T411E/K360E	D401K/Q347R
T411E/S364K	D401K/K370S
T411E/K370S	D401K/S364K
Q347E	E357Q
Q347E	E357Q/Q362K
K360D/Q362E	Q347R
K360D/Q362E	D401K
K360D/Q362E	Q347R/D401K
K360E/Q362E	Q347R
K360E/Q362E	D401K
K360E/Q362E	Q347R/D401K
Q362E/N390D	D401K
Q347E/K360D	D401N
K360D	Q347R/N390K
K360D	N390K/D401N
K360E	Y349H
K370S/Q347E	S364K
K370S/E357L	S364K
K370S/E357Q	S364K
K370S/Q347E/E357L	S364K
K370S/Q347E/E357Q	S364K

Fig. 4D

Monomer 1	Monomer 2
L368D/K370S/Q347E	S364K
L368D/K370S/E357L	S364K
L368D/K370S/E357Q	S364K
L368D/K370S/Q347E/E357L	S364K
L368D/K370S/Q347E/E357Q	S364K
L368E/K370S/Q347E	S364K
L368E/K370S/E357L	S364K
L368E/K370S/E357Q	S364K
L368E/K370S/Q347E/E357L	S364K
L368E/K370S/Q347E/E357Q	S364K
L368D/K370T/Q347E	S364K
L368D/K370T/E357L	S364K
L368D/K370T/E357Q	S364K
L368D/K370T/Q347E/E357L	S364K
L368D/K370T/Q347E/E357Q	S364K
L368E/K370T/Q347E	S364K
L368E/K370T/E357L	S364K
L368E/K370T/E357Q	S364K
L368E/K370T/Q347E/E357L	S364K
L368E/K370T/Q347E/E357Q	S364K
T411E/Q362E	D401K/T411K
T411E/N390D	D401K/T411K
T411E/Q362E	D401R/T411R
T411E/N390D	D401R/T411R
Y407T	T366Y
F405A	T394W
T366Y/F405A	T394W/Y407T
Y407A	T366W

Fig. 4E

Monomer 1	Monomer 2
K392D/K409D	E356K/D399K
K370D/K392D/K409D	E356K/E357K/D399K
K274Q/R355Q/N384S/K392N/V397M/Q419E/K447_	P217R/P228R/N276K
K274Q/R355Q/N384S/K392N/V397M/Q419E/K447_	N276K
N384S/K392N/V397M/Q419E	N276K
D221E/P228E/L368E	D221R/P228R/K409R
C220E/P228E/L368E	C220R/E224R/P228R/K409R
F405L	K409R
T366I/K392M/T394W	F405A/Y407V
T366V/K409F	L351Y/Y407A
T366A/K392E/K409F/T411E	D399R/S400R/Y407A
L351K	L351E
K274Q/R355Q/Q419E/K447_	P217R/P228R/N276K
K274Q/R355Q/Q419E/K447_	N276K
I199T/N203D/K274Q/R355Q/N384S/K392N/V397M/Q419E/K447_	Q196K/I199T/P217R/P228R/N276K
I199T/N203D/K274Q/R355Q/N384S/K392N/V397M/Q419E/K447_	Q196K/I199T/N276K
I199T/N203D/K274Q/R355Q/Q419E/K447_	Q196K/I199T/P217R/P228R/N276K
I199T/N203D/K274Q/R355Q/Q419E/K447_	Q196K/I199T/N276K
T366S/L368A/Y407V	T366W
T366S/L368A/Y407V/Y349C	T366W/S354C
T366S/L368A/Y407V/S354C	T366W/Y349C

Fig. 4F

Monomer 1	Monomer 2
I199T/N203D/K274Q/R355Q/N384S/K392N/V397M/Q419E/K447_	
N208D/Q295E/N384D/Q418E/N421D	
N208D/Q295E/Q418E/N421D	
Q196K/I199T/P217R/P228R/N276K	
Q196K/I199T/N276K	
K274Q/R355Q/N384S/K392N/V397M/Q419E/K447_	
Q295E/N384D/Q418E/N421D	
Q295E/Q418E/N421D	
P217R/P228R/N276K	
N276K	
E269Q/E272Q/E283Q/E357Q	
E269Q/E272Q/E283Q	
E269Q/E272Q	
E269Q/E283Q	
E272Q/E283Q	
E269Q	

Fig. 5

Variant constant region	Substitutions
pI-ISO(-)	I199T/N203D/K274Q/R355Q/N384S/K392N/N397M/Q418E/K447_
pI_ISO(-)-Fc only	K274Q/R355Q/N384S/K392N/V397M/Q418E/K447_
pI_(-)_isosteric_A	N208D/Q295E/N384D/Q418E/N421D
pI_(-)_isosteric A-Fc only	Q295E/N384D/Q418E/N421D
pI_(-)_isosteric_B	N208D/Q295E/Q418E/N421D
pI_(-)_isosteric_B-Fc only	Q295E/Q418E/N421D
pI_ISO(+RR)	Q196K/I199T/P217R/P228R/N276K
pI_ISO(+RR)-Fc only	P217R/P228R/N276K
pI_ISO(+)	Q196K/I199T/N276K
pI_ISO(+)-Fc only	N276K
pI_(+)_isosteric_A	E269Q/E272Q/E283Q/E357Q
pI_(+)_isosteric_B	E269Q/E272Q/E283Q
pI_(+)_isosteric_E269Q/E272Q	E269Q/E272Q
pI_(+)_isosteric_E269Q/E283Q	E269Q/E283Q
pI_(+)_isosteric_E272Q/E283Q	E272Q/E283Q
pI_(+)_isosteric_E269Q	E269Q

Fig. 6

Ablation Variants

G236R
S239G
S239K
S239Q
S239R
V266D
S267K
S267R
H268K
E269R
T299R
T299K
K322A
A327G
A327L
A327N
A327Q
L328E
L328R
P329A
P329H
P329K
A330L
A330S/P331S
I332K
I332R
V266D/A327Q
V266D/P329K
S267R/A327Q
S267R/P329K
G236R/L328R
E233P/L234V/L235A/G236_/S239K
E233P/L234V/L235A/G236_/S267K
E233P/L234V/L235A/G236_/S239K/A327G
E233P/L234V/L235A/G236_/S267K/A327G
E233P/L234V/L235A/G236_
S239K/S267K
S267K/P329K

Fig. 7

236A
239D
239E
332E
332D
239D/332E
236A/332E
239D/332E/330L
332E/330L
243L
298A
299T

333A
334A
S298A/E333A
S298A/E333A/K334A

Fig. 8

Positive Charged scFv Linkers

Name	Sequence	Length	Charge	SEQ ID NO:
Gly-Ser 15	GGGGSGGGGSGGGGS	15	0	XXX
Whitlow linker	GSTSGSGKPGSGEGSTKG	18	+1	XXX
6paxA_1 (+A)	IRPRAIGGSKPRVA	14	+4	XXX
+B	GKGGSGKGGSGKGGS	15	+3	XXX
+C	GGKGSGGKGSGGKGS	15	+3	XXX
+D	GGGKSGGGKSGGGKS	15	+3	XXX
+E	GKGKSGKGKSGKGKS	15	+6	XXX
+F	GGGKSGGKGSGKGGS	15	+3	XXX
+G	GKPGSGKPGSGKPGS	15	+3	XXX
+H	GKPGSGKPGSGKPGSGKPGS	20	+4	XXX
+I	GKGKSGKGKSGKGKSGKGKS	20	+8	XXX

Negative Charged scFv Linkers

Name	Sequence	Length	Charge	SEQ ID NO:
Gly-Ser 20	GGGGSGGGGSGGGGSGGGGS	20	0	XXX
3hsc_2 (-A)	STAGDTHLGGEDFD	14	-4	XXX
-B	GEGGSGEGGSGEGGS	15	-3	XXX
-C	GGEGSGGEGSGGEGS	15	-3	XXX
-D	GGGESGGGESGGGES	15	-3	XXX
-E	GEGESGEGESGEGES	15	-6	XXX
-F	GGGESGGEGSGEGGS	15	-3	XXX
-G	GEGESGEGESGEGESGEGES	20	-8	XXX

Additional scFv Linkers

GGGGSGGGGSGGGGS	SEQ ID NO: XXX
GGGGSGGGGSGGGGSGGGGS	SEQ ID NO: XXX
GSTSGSGKPGSGEGSTKG	SEQ ID NO: XXX
PRGASKSGSASQTGSAPGS	SEQ ID NO: XXX
GTAAAGAGAAGGAAAGAAG	SEQ ID NO: XXX
GTSGSSGSGSGGSGSGGGG	SEQ ID NO: XXX
GKPGSGKPGSGKPGSGKPGS	SEQ ID NO: XXX

Fig. 9

Useful domain linkers

Name	Sequence	SEQ ID NO:
$(GGGGS)_1$ or GGGGS	GGGGS	XXX
$(GGGGS)_2$	GGGGSGGGGS	XXX
$(GGGGS)_3$	GGGGSGGGGSGGGGS	XXX
$(GGGGS)_4$	GGGGSGGGGSGGGGSGGGGS	XXX
$(GGGGS)_5$	GGGGSGGGGSGGGGSGGGGSGGGGS	XXX
$(GGGGS)_6$	GGGGSGGGGSGGGGSGGGGSGGGGSGGGGS	XXX
$(GGGGS)_7$	GGGGSGGGGSGGGGSGGGGSGGGGSGGGGSGGGGS	XXX
$(GGGGA)_1$ or GGGGA	GGGGA	XXX
$(GGGGA)_2$	GGGGAGGGGA	XXX
$(GGGGA)_3$	GGGGAGGGGAGGGGA	XXX
$(GGGGA)_4$	GGGGAGGGGAGGGGAGGGGA	XXX
$(GGGGA)_5$	GGGGAGGGGAGGGGAGGGGAGGGGA	XXX
$(GGGGA)_6$	GGGGAGGGGAGGGGAGGGGAGGGGAGGGGA	XXX
$(GGGGA)_7$	GGGGAGGGGAGGGGAGGGGAGGGGAGGGGAGGGGA	XXX
30AA-linker	DPALVHQRPAPPGGGGSGGGGSGGGGSGGG	XXX
$(GKPGS)_1$ or GKPGS	GKPGS	XXX
$(GKPGS)_5$	GKPGSGKPGSGKPGSGKPGSGKPGS	XXX
$(GKPGS)_6$	GKPGSGKPGSGKPGSGKPGSGKPGSGKPGS	XXX
$(GGGES)_1$ or GGGES	GGGES	XXX
“full hinge”	EPKSCDKTHTCPPCP	XXX
“lower half hinge”	KTHTCPPCP	XXX
“full hinge C220S variant”	EPKSSDKTHTCPPCP	XXX
“flex lower half hinge”	GGGGSGGGGSKTHTCPPCP	XXX
“charged lower half hinge1”	GKPGSGKPGSKTHTCPPCP	XXX
“charged lower half hinge2”	GKPGSKTHTCPPCP	XXX
“upper half hinge”	EPKSC	XXX
“flex upper half hinge”	EPKSCGGGGSGGGGS	XXX
“charged upper half hinge1”	EPKSCGKPGSGKPGS	XXX
“charged upper half hinge2”	EPKSCGKPGS	XXX

Fig. 10

Monomer 1 (-)	**Monomer 2 (+)**
Heterodimer skew variants L368D/K370S	Heterodimer skew variants S364K/E357Q
Isosteric pI variant Q295E/N384D/Q418E/N421D	
±M428L/N434S for FcRn	±M428L/N434S for FcRn
±S239D for enhanced ADCC	±S239D for enhanced ADCC
±I332E for enhanced ADCC	±I332E for enhanced ADCC

Fig. 11

XENP	Heterodimer-skew variant, Chain 1	Heterodimer-skew variant, Chain 2	Heterodimer Yield (%)	CH3 Tm (°C)
12757	none	none	52.7	83.1
12758	L368D/K370S	S364K	94.4	76.6
12759	L368D/K370S	S364K/E357L	90.2	77.2
12760	L368D/K370S	S364K/E357Q	95.2	77.5
12761	T411E/K360E/Q362E	D401K	85.6	80.6
12496	L368E/K370S	S364K	91.5	n.d.
12511	K370S	S364K	59.9	n.d.
12840	L368E/K370S	S364K/E357Q	59.5	n.d.
12841	K370S	S364K/E357Q	90.4	n.d.
12894	L368E/K370S	S364K	41.0	n.d.
12895	K370S	S364K	49.3	n.d.
12896	L368E/K370S	S364K/E357Q	73.9	n.d.
12901	K370S	S364K/E357Q	87.9	n.d.

Fig. 12

Fig. 12A

FcKO Heterodimeric Fc Backbone 1

>FcKO Heterodimeric Fc Backbone 1 monomer 1 (-) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

> FcKO Heterodimeric Fc Backbone 1 monomer 2 (+) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

FcKO Heterodimeric Fc Backbone 2

> FcKO Heterodimeric Fc Backbone 2 monomer 1 (-) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

> FcKO Heterodimeric Fc Backbone monomer 2 (+) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

FcKO Heterodimeric Fc Backbone 3

> FcKO Heterodimeric Fc Backbone 3 monomer 1 (-) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCEVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

> FcKO Heterodimeric Fc Backbone 3 monomer 2 (+) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

FcKO Heterodimeric Fc Backbone 4

> FcKO Heterodimeric Fc Backbone 4 monomer 1 (-) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTENEVSLTCLVKGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLEVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

> FcKO Heterodimeric Fc Backbone 4 monomer 2 (+) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSKGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Fig. 12B

FcKO Heterodimeric Fc Backbone 5

> FcKO Heterodimeric Fc Backbone 5 monomer 1 (-) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

> FcKO Heterodimeric Fc Backbone 5 monomer 2 (+) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDQLTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

FcKO Heterodimeric Fc Backbone 6

> FcKO Heterodimeric Fc Backbone 6 monomer 1 (-) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYASTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

> FcKO Heterodimeric Fc Backbone 6 monomer 2 (+) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYASTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

FcKO Heterodimeric Fc Backbone 7

> FcKO Heterodimeric Fc Backbone 7 monomer 1 (-) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYSSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

> FcKO Heterodimeric Fc Backbone 7 monomer 2 (+) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYSSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

FcKO Heterodimeric Fc Backbone 8

> FcKO Heterodimeric Fc Backbone 8 monomer 1 (-) (SEQ ID NO: XXX)

APEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQFNWYVDGVEVHNAKTKPREEEFNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPSQEEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSRLTVDKSRWEEGDVFSCSVMHEALHNHYTQKSLSLSLGK

> FcKO Heterodimeric Fc Backbone 8 monomer 2 (+) (SEQ ID NO: XXX)

APEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPSQEQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSVMHEALHNHYTQKSLSLSLGK

Fig. 12C

FcKO Heterodimeric Fc Backbone 9

> FcKO Heterodimeric Fc Backbone 9 monomer 1 (-) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVQFNWYVDGVEVHNAKTKPREEEFNSTFRVVSVL
TVVHQDWLNGKEYKCKVSNKGLPAPIEKTISKTKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPMLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

> FcKO Heterodimeric Fc Backbone 9 monomer 2 (+) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTFRVVSVL
TVVHQDWLNGKEYKCKVSNKGLPAPIEKTISKTKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPMLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

FcKO Heterodimeric Fc Backbone 10

> FcKO Heterodimeric Fc Backbone 10 monomer 1 (-) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVQFNWYVDGVEVHNAKTKPREEEFNSTFRVVSVL
TVVHQDWLNGKEYKCKVSNKGLPAPIEKTISKTKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPMLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

> FcKO Heterodimeric Fc Backbone 10 monomer 2 (+) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTFRVVSVL
TVVHQDWLNGKEYKCKVSNKGLPAPIEKTISKTKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPMLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

FcKO Heterodimeric Fc Backbone 11

> FcKO Heterodimeric Fc Backbone 11 monomer 1 (-) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

> FcKO Heterodimeric Fc Backbone 11 monomer 2 (+) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

FcKO Heterodimeric Fc Backbone 12

> FcKO Heterodimeric Fc Backbone 12 monomer 1 (-) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFKWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

> FcKO Heterodimeric Fc Backbone 12 monomer 2 (+) (SEQ ID NO: XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Fig. 12D

FcKO Heterodimeric Fc Backbone 13

> FcKO Heterodimeric Fc Backbone 13 monomer 1 (SEQ ID NO: XXX)

APEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLWCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

> FcKO Heterodimeric Fc Backbone 13 monomer 2 (SEQ ID NO: XXX)

APEAAGGPSVFLFPPKPKDTLMISRTPEVTCVVVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLSCAVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLVSKLTVDKSRWQQGNVFSCSVMHEALHNRFTQKSLSLSPGK

FcKO Heterodimeric Fc Backbone 14

> FcKO Heterodimeric Fc Backbone 14 monomer 1 (SEQ ID NO: XXX)

APEAAGGPSVFLFPPKPKDTLYITREPEVTCVVVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLWCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

> FcKO Heterodimeric Fc Backbone 14 monomer 2 (SEQ ID NO: XXX)

APEAAGGPSVFLFPPKPKDTLYITREPEVTCVVVSVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLSCAVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLVSKLTVDKSRWQQGNVFSCSVMHEALHNRFTQKSLSLSPGK

FcKO Heterodimeric Fc Backbone 15

> FcKO Heterodimeric Fc Backbone 15 monomer 1 (SEQ ID NO:XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

> FcKO Heterodimeric Fc Backbone 15 monomer 2 (SEQ ID NO:XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDQLTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

FcKO Heterodimeric Fc Backbone 16

> FcKO Heterodimeric Fc Backbone 16 monomer 1 (SEQ ID NO:XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

> FcKO Heterodimeric Fc Backbone 16 monomer 2 (SEQ ID NO:XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

Fig. 12E

FcKO Heterodimeric Fc Backbone 17

> FcKO Heterodimeric Fc Backbone 17 monomer 1 (SEQ ID NO:XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

> FcKO Heterodimeric Fc Backbone 17 monomer 2 (SEQ ID NO:XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDQLTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

Fig. 13

Fig. 13A

Heterodimeric Fc Backbone 1

>Heterodimeric Fc Backbone 1 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 1 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 2

>Heterodimeric Fc Backbone 2 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>Heterodimeric Fc Backbone monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 3

>Heterodimeric Fc Backbone 3 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCEVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 3 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 4

>Heterodimeric Fc Backbone 4 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTENEVSLTCLVKGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLEVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 4 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSKGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Fig. 13B

Heterodimeric Fc Backbone 5

>Heterodimeric Fc Backbone 5 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 5 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDQLTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 6

>Heterodimeric Fc Backbone 6 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYASTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 6 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYASTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 7

>Heterodimeric Fc Backbone 7 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYSSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 7 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYSSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Heterodimeric Fc Backbone 8

>Heterodimeric Fc Backbone 8 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 8 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

Fig. 13C

Heterodimeric Fc Backbone 9

>Heterodimeric Fc Backbone 9 monomer 1 (SEQ ID NO:XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 9 monomer 2 (SEQ ID NO:XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDQLTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

Heterodimeric Fc Backbone 10

>Heterodimeric Fc Backbone 10 monomer 1 (SEQ ID NO:XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 10 monomer 2 (SEQ ID NO:XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

Heterodimeric Fc Backbone 11

>Heterodimeric Fc Backbone 11 monomer 1 (SEQ ID NO:XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHAHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 11 monomer 2 (SEQ ID NO:XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRDQLTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHAHYTQKSLSLSPGK

Fig. 14

Fig. 14A

S239D/I332E : S239D/I332E

>ADCC-enhanced Heterodimeric Backbone 1 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 1 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

S239D : S239D

>ADCC-enhanced Heterodimeric Backbone 2 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 2 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

I332E : I332E

>ADCC-enhanced Heterodimeric Backbone 3 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 3 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

WT : S239D/I332E

>ADCC-enhanced Heterodimeric Backbone 4 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 4 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

WT : S239D

>ADCC-enhanced Heterodimeric Backbone 5 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 5 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Fig. 14B

WT : I332E

>ADCC-enhanced Heterodimeric Backbone 6 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 6 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

S239D/I332E : WT

>ADCC-enhanced Heterodimeric Backbone 7 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 7 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

S239D : WT

>ADCC-enhanced Heterodimeric Backbone 8 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 8 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

I332E : WT

>ADCC-enhanced Heterodimeric Backbone 9 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 9 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

S239D/I332E : S239D

>ADCC-enhanced Heterodimeric Backbone 10 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 10 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Fig. 14C

S239D/I332E : I332E

>ADCC-enhanced Heterodimeric Backbone 11 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 11 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

S239D : S239D/I332E

>ADCC-enhanced Heterodimeric Backbone 12 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 12 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

I332E : S239D/I332E

>ADCC-enhanced Heterodimeric Backbone 13 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 13 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

S239D : I332E

>ADCC-enhanced Heterodimeric Backbone 14 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 14 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

I332E : S239D

>ADCC-enhanced Heterodimeric Backbone 15 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 15 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Fig. 15

Fig. 15A

S239D/I332E : S239D/I332E

>ADCC-enhanced Heterodimeric Backbone 1 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 1 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

S239D : S239D

>ADCC-enhanced Heterodimeric Backbone 2 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 2 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

I332E : I332E

>ADCC-enhanced Heterodimeric Backbone 3 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 3 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

WT : S239D/I332E

>ADCC-enhanced Heterodimeric Backbone 4 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 4 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

WT : S239D

>ADCC-enhanced Heterodimeric Backbone 5 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 5 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

Fig. 15B

WT : I332E

>ADCC-enhanced Heterodimeric Backbone 6 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 6 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

S239D/I332E : WT

>ADCC-enhanced Heterodimeric Backbone 7 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 7 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

S239D : WT

>ADCC-enhanced Heterodimeric Backbone 8 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 8 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

I332E : WT

>ADCC-enhanced Heterodimeric Backbone 9 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 9 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

S239D/I332E : S239D

>ADCC-enhanced Heterodimeric Backbone 10 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 10 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

Fig. 15C

S239D/I332E : I332E

>ADCC-enhanced Heterodimeric Backbone 11 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 11 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

S239D : S239D/I332E

>ADCC-enhanced Heterodimeric Backbone 12 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 12 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

I332E : S239D/I332E

>ADCC-enhanced Heterodimeric Backbone 13 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 13 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

S239D : I332E

>ADCC-enhanced Heterodimeric Backbone 14 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 14 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

I332E : S239D

>ADCC-enhanced Heterodimeric Backbone 15 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 15 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPGK

Fig. 16

Fig. 16A

2 + 1 mAb-scFv Heterodimeric Fc Backbone (FcKO)

>2 + 1 mAb-scFv Heterodimeric Fc Backbone FcKO monomer 1 (-) (SEQ ID NO:XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEW
ESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>2 + 1 mAb-scFv Heterodimeric Fc Backbone FcKO monomer 2 (+) (SEQ ID NO:XXX)

APPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVL
TVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEW
ESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

2 + 1 mAb-scFv Heterodimeric Fc Backbone (WT effector)

>Heterodimeric Fc Backbone 1 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>Heterodimeric Fc Backbone 1 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

S239D/I332E : S239D/I332E

>ADCC-enhanced Heterodimeric Backbone 1 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 1 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

S239D : S239D

>ADCC-enhanced Heterodimeric Backbone 2 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 2 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

Fig. 16B

I332E : I332E

>ADCC-enhanced Heterodimeric Backbone 3 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 3 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

WT : S239D/I332E

>ADCC-enhanced Heterodimeric Backbone 4 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 4 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

WT : S239D

>ADCC-enhanced Heterodimeric Backbone 5 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 5 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

WT : I332E

>ADCC-enhanced Heterodimeric Backbone 6 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 6 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

S239D/I332E : WT

>ADCC-enhanced Heterodimeric Backbone 7 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 7 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

Fig. 16C

S239D : WT

>ADCC-enhanced Heterodimeric Backbone 8 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 8 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

I332E : WT

>ADCC-enhanced Heterodimeric Backbone 9 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 9 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

S239D/I332E : S239D

>ADCC-enhanced Heterodimeric Backbone 10 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 10 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

S239D/I332E : I332E

>ADCC-enhanced Heterodimeric Backbone 11 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 11 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

S239D : S239D/I332E

>ADCC-enhanced Heterodimeric Backbone 12 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 12 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

Fig. 16D

I332E : S239D/I332E

>ADCC-enhanced Heterodimeric Backbone 13 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 13 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

S239D : I332E

>ADCC-enhanced Heterodimeric Backbone 14 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 14 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

I332E : S239D

>ADCC-enhanced Heterodimeric Backbone 15 monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 15 monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG

S239D/I332E : S239D/I332E

>ADCC-enhanced Heterodimeric Backbone 1 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 1 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPG

S239D : S239D

>ADCC-enhanced Heterodimeric Backbone 2 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 2 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPG

Fig. 16E

I332E : I332E

>ADCC-enhanced Heterodimeric Backbone 3 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 3 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPG

WT : S239D/I332E

>ADCC-enhanced Heterodimeric Backbone 4 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 4 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPG

WT : S239D

>ADCC-enhanced Heterodimeric Backbone 5 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 5 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPG

WT : I332E

>ADCC-enhanced Heterodimeric Backbone 6 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 6 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPG

S239D/I332E : WT

>ADCC-enhanced Heterodimeric Backbone 7 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 7 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPG

Fig. 16F

S239D : WT

>ADCC-enhanced Heterodimeric Backbone 8 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 8 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPG

I332E : WT

>ADCC-enhanced Heterodimeric Backbone 9 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 9 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPG

S239D/I332E : S239D

>ADCC-enhanced Heterodimeric Backbone 10 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 10 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPG

S239D/I332E : I332E

>ADCC-enhanced Heterodimeric Backbone 11 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 11 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPG

S239D : S239D/I332E

>ADCC-enhanced Heterodimeric Backbone 12 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 12 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPG

Fig. 16G

I332E : S239D/I332E

>ADCC-enhanced Heterodimeric Backbone 13 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 13 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPG

S239D : I332E

>ADCC-enhanced Heterodimeric Backbone 14 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 14 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPG

I332E : S239D

>ADCC-enhanced Heterodimeric Backbone 15 w/ Xtend monomer 1 (-) (SEQ ID NO: XXX)

APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVE
WESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVLHEALHSHYTQKSLSLSPGK

>ADCC-enhanced Heterodimeric Backbone 15 w/ Xtend monomer 2 (+) (SEQ ID NO: XXX)

APELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSV
LTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVE
WESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVLHEALHSHYTQKSLSLSPG

Fig. 17

IgG1 CH1(+) (SEQ ID NO: XXX)

ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSS
LGTQTYICNVNHKPSNTKVDKKV

IgG1 CH1(-) (SEQ ID NO: XXX)

ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSS
LGTQTYICNVNHKPSDTKVDKKV

IgG2 CH1(+) (SEQ ID NO: XXX)

ASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSN
FGTQTYTCNVDHKPSNTKVDKTV

IgG2 CH1(-) (SEQ ID NO: XXX)

ASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSN
FGTQTYTCNVDHKPSDTKVDKTV

IgG4 CH1(+) (SEQ ID NO: XXX)

ASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSS
LGTKTYTCNVDHKPSNTKVDKRV

IgG4 CH1(-) (SEQ ID NO: XXX)

ASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSS
LGTKTYTCNVDHKPSDTKVDKRV

Fig. 18

IgG1 hinge (SEQ ID NO: XXX)
EPKSCDKTHTCPPCP

IgG2 hinge (SEQ ID NO: XXX)
ERKCCVECPPCP

IgG4 hinge (SEQ ID NO: XXX)
ESKYGPPCPSCP

Fig. 19

Light Chain Constant Domain – Kappa (SEQ ID NO: XXX)

RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLS
KADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Light Chain Constant Domain – Lambda (SEQ ID NO: XXX)

GQPKAAPSVTLFPPSSEELQANKATLVCLISDFYPGAVTVAWKADSSPVKAGVETTTPSKQSNNKYAASSYLSLT
PEQWKSHRSYSCQVTHEGSTVEKTVAPTECS

Fig. 20

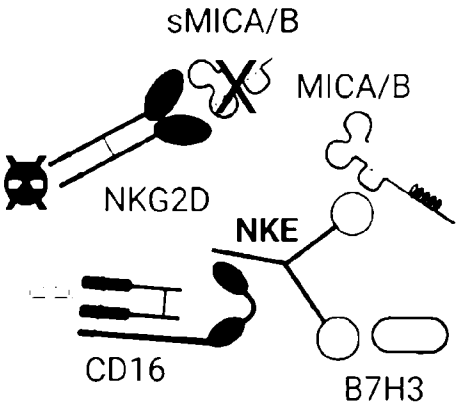


Fig. 21 Fig. 21A

D94837_1E11_1 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	EIQLQQSGPELVKPGASVKVSCKASGYAFTSYNMYWVKQSHGKSLEW IGYIDPYNGGTIYNQKFKGKATLTVDKSSSTAYMLLNSLTSEDSAVY YCARVGDAYPFAYWGQGTLVTVSA	XXX
vhCDR1	GYAFTSYNMY	XXX
vhCDR2	YIDPYNGGTIYNQKFKG	XXX
vhCDR3	VGDAYPFAY	XXX
Variable light (vl) domain	DIVLTQSPASLAVSLGQRATISCRASESVDNYGISFMNWFQQKAGQP PKLLIYAASNQGSGVPARFSGSGSGTDFSLNIHPMEEDDTAMYFCQQ RKEVPFTFGSGTKLEIK	XXX
vlCDR1	RASESVDNYGISFMN	XXX
vlCDR2	AASNQGS	XXX
vlCDR3	QQRKEVPFT	XXX

D94837_1E11_1 [MICA/B]_H1L1

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QIQLVQSGAEVKKPGASVKVSCKASGYAFTSYNMYWVRQAPGQSLEW MGYIDPYNGGTIYNQKLQGRVTMTVDKSTSTAYMELRSLRSDDTAVY YCARVGDAYPFAYWGQGTLVTVSS	XXX
vhCDR1	GYAFTSYNMY	XXX
vhCDR2	YIDPYNGGTIYNQKLQG	XXX
vhCDR3	VGDAYPFAY	XXX
Variable light (vl) domain	DIVLTQSPATLSLSPGERATLSCRASESVDNYGISFMNWFQQKPGQP PRLLIYAASNQGSGVPARFSGSGSGTDFTLTISSLEPEDFAVYFCQQ RKEVPFTFGSGTKLEIK	XXX
vlCDR1	RASESVDNYGISFMN	XXX
vlCDR2	AASNQGS	XXX
vlCDR3	QQRKEVPFT	XXX

D94837_1E11_1 [MICA/B]_H1L2

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QIQLVQSGAEVKKPGASVKVSCKASGYAFTSYNMYWVRQAPGQSLEW MGYIDPYNGGTIYNQKLQGRVTMTVDKSTSTAYMELRSLRSDDTAVY YCARVGDAYPFAYWGQGTLVTVSS	XXX
vhCDR1	GYAFTSYNMY	XXX
vhCDR2	YIDPYNGGTIYNQKLQG	XXX
vhCDR3	VGDAYPFAY	XXX
Variable light (vl) domain	DIVLTQSPDSLAVSLGERATINCKASESVDNYGISFMNWFQQKPGQP PKLLIYAASNQGSGVPARFSGSGSGTDFTLTISSLQAEDVAVYFCQQ RKEVPFTFGSGTKLEIK	XXX
vlCDR1	KASESVDNYGISFMN	XXX
vlCDR2	AASNQGS	XXX
vlCDR3	QQRKEVPFT	XXX

Fig. 21B

D94837_1E11_1 [MICA/B]_H2L1

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QIQLVQSGSELKKPGASVKVSCKASGYAFTSYNMYWVRQAPGQSLEW MGYIDPYNGGTIYNQGFTGRFVFSVDKSVSTAYLQISSLKAEDTAVY YCARVGDAYPFAYWGQGTLVTVSS	XXX
vhCDR1	GYAFTSYNMY	XXX
vhCDR2	YIDPYNGGTIYNQGFTG	XXX
vhCDR3	VGDAYPFAY	XXX
Variable light (vl) domain	DIVLTQSPATLSLSPGERATLSCRASESVDNYGISFMNWFQQKPGQP PRLLIYAASNQGSGVPARFSGSGSGTDFTLTISSLEPEDFAVYFCQQ RKEVPFTFGSGTKLEIK	XXX
vlCDR1	RASESVDNYGISFMN	XXX
vlCDR2	AASNQGS	XXX
vlCDR3	QQRKEVPFT	XXX

D94837_1E11_1 [MICA/B]_H2L2

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QIQLVQSGSELKKPGASVKVSCKASGYAFTSYNMYWVRQAPGQSLEW MGYIDPYNGGTIYNQGFTGRFVFSVDKSVSTAYLQISSLKAEDTAVY YCARVGDAYPFAYWGQGTLVTVSS	XXX
vhCDR1	GYAFTSYNMY	XXX
vhCDR2	YIDPYNGGTIYNQGFTG	XXX
vhCDR3	VGDAYPFAY	XXX
Variable light (vl) domain	DIVLTQSPDSLAVSLGERATINCKASESVDNYGISFMNWFQQKPGQP PKLLIYAASNQGSGVPARFSGSGSGTDFTLTISSLQAEDVAVYFCQQ RKEVPFTFGSGTKLEIK	XXX
vlCDR1	KASESVDNYGISFMN	XXX
vlCDR2	AASNQGS	XXX
vlCDR3	QQRKEVPFT	XXX

2E5 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	EVKLVESGGGLVQPGGSLKLSCATSGFTFSDYYMFWVRQTPEKRLEW VAYISEGGGSTYYPDTIKGRFTISRDNAKNTLYLQMSRLRSEDTAMY YCVRQRGAYNRYDDGRGFAYWGQGTLVTVSA	XXX
vhCDR1	GFTFSDYYMF	XXX
vhCDR2	YISEGGGSTYYPDTIKG	XXX
vhCDR3	QRGAYNRYDDGRGFAY	XXX
Variable light (vl) domain	DVLMTQTPLSLPVSLGDQASISCRSSQSIVHSNGNTYLEWYLQKPGQ SPKLLIYKVSNRFSGVPDRLSGSGSGTDFTLKISRGEAEDLGVYYCF QGSHVPWTFGGGTKLEIK	XXX
vlCDR1	RSSQSIVHSNGNTYLE	XXX
vlCDR2	KVSNRFS	XXX
vlCDR3	FQGSHVPWT	XXX

Fig. 21C

2E5 [MICA/B]_H1L1

	sequence	SEQ ID NO:
Variable heavy (vh) domain	EVQLLESGGGLVQPGGSLRLSCATSGFTFSDYYMFWVRQAPGKRLEW VSYISEGGGSTYYPDSVKGRFTISRDNSKNTLYLQMNSLRAEDTAVY YCVRQRGAYNRYDDGRGTLVTVSS	XXX
vhCDR1	GFTFSDYYMF	XXX
vhCDR2	YISEGGGSTYYPDSVKG	XXX
vhCDR3	QRGAYNRYDD	XXX
Variable light (vl) domain	DVLMTQSPLSLPVTLGQPASISCRSSQSIVHSNGNTYLEWYQQRPGQ SPRLLIYKVSNRFSGVPDRLSGSGSGTDFTLKISRVEAEDVGVYYCF QGSHVPWTFGGGTKVEIK	XXX
vlCDR1	RSSQSIVHSNGNTYLE	XXX
vlCDR2	KVSNRFS	XXX
vlCDR3	FQGSHVPWT	XXX

2E5 [MICA/B]_H1L2

	sequence	SEQ ID NO:
Variable heavy (vh) domain	EVQLLESGGGLVQPGGSLRLSCATSGFTFSDYYMFWVRQAPGKRLEW VSYISEGGGSTYYPDSVKGRFTISRDNSKNTLYLQMNSLRAEDTAVY YCVRQRGAYNRYDDGRGTLVTVSS	XXX
vhCDR1	GFTFSDYYMF	XXX
vhCDR2	YISEGGGSTYYPDSVKG	XXX
vhCDR3	QRGAYNRYDD	XXX
Variable light (vl) domain	DVLMTQSPDSLAVSLGERATINCKSSQSIVHSNGNTYLEWYQQKPGQ SPKLLIYKVSNRFSGVPDRLSGSGSGTDFTLTISSLQAEDVAVYYCF QGSHVPWTFGGGTKVEIK	XXX
vlCDR1	KSSQSIVHSNGNTYLE	XXX
vlCDR2	KVSNRFS	XXX
vlCDR3	FQGSHVPWT	XXX

2E5 [MICA/B]_H2L1

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLVQSGAEVKKPGASVKVSCKTSGFTFSDYYMFWVRQAPGQRLEW MGYISEGGGSTYYPDKFQGRVTMTRDNSKNTLYMELSSLRSEDTAVY YCVRQRGAYNRYDDGRGTLVTVSS	XXX
vhCDR1	GFTFSDYYMF	XXX
vhCDR2	YISEGGGSTYYPDKFQG	XXX
vhCDR3	QRGAYNRYDD	XXX
Variable light (vl) domain	DVLMTQSPLSLPVTLGQPASISCRSSQSIVHSNGNTYLEWYQQRPGQ SPRLLIYKVSNRFSGVPDRLSGSGSGTDFTLKISRVEAEDVGVYYCF QGSHVPWTFGGGTKVEIK	XXX
vlCDR1	RSSQSIVHSNGNTYLE	XXX
vlCDR2	KVSNRFS	XXX
vlCDR3	FQGSHVPWT	XXX

Fig. 21D

2E5 [MICA/B]_H2L2

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLVQSGAEVKKPGASVKVSCKTSGFTFSDYYMFWVRQAPGQRLEW MGYISEGGGSTYYPDKFQGRVTMTRDNSKNTLYMELSSLRSEDTAVY YCVRQRGAYNRYDDGRGTLVTVSS	XXX
vhCDR1	GFTFSDYYMF	XXX
vhCDR2	YISEGGGSTYYPDKFQG	XXX
vhCDR3	QRGAYNRYDD	XXX
Variable light (vl) domain	DVLMTQSPDSLAVSLGERATINCKSSQSIVHSNGNTYLEWYQQKPGQ SPKLLIYKVSNRFSGVPDRLSGSGSGTDFTLTISSLQAEDVAVYYCF QGSHVPWTFGGGTKVEIK	XXX
vlCDR1	KSSQSIVHSNGNTYLE	XXX
vlCDR2	KVSNRFS	XXX
vlCDR3	FQGSHVPWT	XXX

D94852_2E12 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLQQSGAELVRPGTSVKVSCKASGYAFTNYLIEWVKQRPGQGLEW IGGINPGSGSTNYNEKFKGKATLTADKSSSTAYMQLSTLTFDDSAVY FCARLGGNYVDYWGQGTTLTVSS	XXX
vhCDR1	GYAFTNYLIE	XXX
vhCDR2	GINPGSGSTNYNEKFKG	XXX
vhCDR3	LGGNYVDY	XXX
Variable light (vl) domain	DIQMTQSPASLSASVGETVTITCRASGNIHNYLAWYQQKQGKSPQLL VYNAKTLADGVPSRFSGSGSGTQYSLKINSLQPEDFGSYYCQHFWST PRTFGGGTKLEIK	XXX
vlCDR1	RASGNIHNYLA	XXX
vlCDR2	NAKTLAD	XXX
vlCDR3	QHFWSTPRT	XXX

D94852_2E12 [MICA/B]_H1L1

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLVQSGAEVKKPGASVKVSCKASGYAFTNYLIEWVRQAPGQGLEW MGGINPGSGSTNYNEKFQGRVTMTADKSISTAYMELSRLRSDDTAVY FCARLGGNYVDYWGQGTLVTVSS	XXX
vhCDR1	GYAFTNYLIE	XXX
vhCDR2	GINPGSGSTNYNEKFQG	XXX
vhCDR3	LGGNYVDY	XXX
Variable light (vl) domain	DIQMTQSPSSLSASVGDRVTITCRASGNIHNYLAWYQQKPGKSPKLL VYNAKTLADGVPSRFSGSGSGTDYTLTISSLQPEDVATYYCQHFWST PRTFGGGTKVEIK	XXX
vlCDR1	RASGNIHNYLA	XXX
vlCDR2	NAKTLAD	XXX
vlCDR3	QHFWSTPRT	XXX

Fig. 21E

D94852_2E12 [MICA/B]_H1L2

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLVQSGAEVKKPGASVKVSCKASGYAFTNYLIEWVRQAPGQGLEW MGGINPGSGSTNYNEKFQGRVTMTADKSISTAYMELSRLRSDDTAVY FCARLGGNYVDYWGQGTLVTVSS	XXX
vhCDR1	GYAFTNYLIE	XXX
vhCDR2	GINPGSGSTNYNEKFQG	XXX
vhCDR3	LGGNYVDY	XXX
Variable light (vl) domain	DIQMTQSPDSLAVSLGERATINCKASGNIHNYLAWYQQKPGQSPKLL VYNAKTLADGVPSRFSGSGSGTDYTLTISSLQAEDVAVYYCQHFWST PRTFGGGTKVEIK	XXX
vlCDR1	KASGNIHNYLA	XXX
vlCDR2	NAKTLAD	XXX
vlCDR3	QHFWSTPRT	XXX

D94852_2E12 [MICA/B]_H2L1

	sequence	SEQ ID NO:
Variable heavy (vh) domain	EVQLVQSGAEVKKPGESLRISCKASGYAFTNYLIEWVRQMPGKGLEW MGGINPGSGSTNYAESFQGHVTISADKSISTAYLQWSSLKASDTAMY FCARLGGNYVDYWGQGTLVTVSS	XXX
vhCDR1	GYAFTNYLIE	XXX
vhCDR2	GINPGSGSTNYAESFQG	XXX
vhCDR3	LGGNYVDY	XXX
Variable light (vl) domain	DIQMTQSPSSLSASVGDRVTITCRASGNIHNYLAWYQQKPGKSPKLL VYNAKTLADGVPSRFSGSGSGTDYTLTISSLQPEDVATYYCQHFWST PRTFGGGTKVEIK	XXX
vlCDR1	RASGNIHNYLA	XXX
vlCDR2	NAKTLAD	XXX
vlCDR3	QHFWSTPRT	XXX

D94852_2E12 [MICA/B]_H2L2

	sequence	SEQ ID NO:
Variable heavy (vh) domain	EVQLVQSGAEVKKPGESLRISCKASGYAFTNYLIEWVRQMPGKGLEW MGGINPGSGSTNYAESFQGHVTISADKSISTAYLQWSSLKASDTAMY FCARLGGNYVDYWGQGTLVTVSS	XXX
vhCDR1	GYAFTNYLIE	XXX
vhCDR2	GINPGSGSTNYAESFQG	XXX
vhCDR3	LGGNYVDY	XXX
Variable light (vl) domain	DIQMTQSPDSLAVSLGERATINCKASGNIHNYLAWYQQKPGQSPKLL VYNAKTLADGVPSRFSGSGSGTDYTLTISSLQAEDVAVYYCQHFWST PRTFGGGTKVEIK	XXX
vlCDR1	KASGNIHNYLA	XXX
vlCDR2	NAKTLAD	XXX
vlCDR3	QHFWSTPRT	XXX

Fig. 21F

D99136_2F7 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVHLKQSGAELVRPGASVKLSCKASGYTFTDYYIDWMNQRPGQGLEW IARIYPGSGNSYYNEKFKGKATLTAEKSASTAHMQLSSLTSEDSAVY FCAREGPTGVAPHWYFDVWGTGTTVTVSS	XXX
vhCDR1	GYTFTDYYID	XXX
vhCDR2	RIYPGSGNSYYNEKFKG	XXX
vhCDR3	EGPTGVAPHWYFDV	XXX
Variable light (vl) domain	DIVMSQSPSSLSSYLGDRVTISCRASQDIGNYLNWYQQKPDGTVKLL IYSTSRLHSGVPSRFSGSGSGTDYSLTISNLEQEDVATYFCQQGNTL PWTFGGGTKLEIK	XXX
vlCDR1	RASQDIGNYLN	XXX
vlCDR2	STSRLHS	XXX
vlCDR3	QQGNTLPWT	XXX

D99136_2F7 [MICA/B]_H1L1

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLVQSGAEVKKPGASVKVSCKASGYTFTDYYIDWMRQAPGQGLEW MGRIYPGSGNSYYNEKFQGRVTMTADKSISTAYMELSRLRSDDTAVY FCAREGPTGVAPHWYFDVWGTGTLVTVSS	XXX
vhCDR1	GYTFTDYYID	XXX
vhCDR2	RIYPGSGNSYYNEKFQG	XXX
vhCDR3	EGPTGVAPHWYFDV	XXX
Variable light (vl) domain	DIVMTQSPSSLSASVGDRVTITCQASQDIGNYLNWYQQKPGKTVKLL IYSTSRLHSGVPSRFSGSGSGTDYTFTISSLQPEDIATYFCQQGNTL PWTFGGGTKVEIK	XXX
vlCDR1	QASQDIGNYLN	XXX
vlCDR2	STSRLHS	XXX
vlCDR3	QQGNTLPWT	XXX

D99136_2F7 [MICA/B]_H1L2

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLVQSGAEVKKPGASVKVSCKASGYTFTDYYIDWMRQAPGQGLEW MGRIYPGSGNSYYNEKFQGRVTMTADKSISTAYMELSRLRSDDTAVY FCAREGPTGVAPHWYFDVWGTGTLVTVSS	XXX
vhCDR1	GYTFTDYYID	XXX
vhCDR2	RIYPGSGNSYYNEKFQG	XXX
vhCDR3	EGPTGVAPHWYFDV	XXX
Variable light (vl) domain	DIVMTQSPDSLAVSLGERATINCKASQDIGNYLNWYQQKPGQTVKLL IYSTSRLHSGVPSRFSGSGSGTDYTLTISSLQAEDVAVYFCQQGNTL PWTFGGGTKVEIK	XXX
vlCDR1	KASQDIGNYLN	XXX
vlCDR2	STSRLHS	XXX
vlCDR3	QQGNTLPWT	XXX

Fig. 21G

D99136_2F7 [MICA/B]_H2L1

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLVQSGSELKKPGASVKVSCKASGYTFTDYYIDWMRQAPGQGLEW MGRIYPGSGNSYYNEGFTGRFVFSADKSVSTAYLQISSLKAEDTAVY FCAREGPTGVAPHWYFDVWGTGTLVTVSS	XXX
vhCDR1	GYTFTDYYID	XXX
vhCDR2	RIYPGSGNSYYNEGFTG	XXX
vhCDR3	EGPTGVAPHWYFDV	XXX
Variable light (vl) domain	DIVMTQSPSSLSASVGDRVTITCQASQDIGNYLNWYQQKPGKTVKLL IYSTSRLHSGVPSRFSGSGSGTDYTFTISSLQPEDIATYFCQQGNTL PWTFGGGTKVEIK	XXX
vlCDR1	QASQDIGNYLN	XXX
vlCDR2	STSRLHS	XXX
vlCDR3	QQGNTLPWT	XXX

D99136_2F7 [MICA/B]_H2L2

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLVQSGSELKKPGASVKVSCKASGYTFTDYYIDWMRQAPGQGLEW MGRIYPGSGNSYYNEGFTGRFVFSADKSVSTAYLQISSLKAEDTAVY FCAREGPTGVAPHWYFDVWGTGTLVTVSS	XXX
vhCDR1	GYTFTDYYID	XXX
vhCDR2	RIYPGSGNSYYNEGFTG	XXX
vhCDR3	EGPTGVAPHWYFDV	XXX
Variable light (vl) domain	DIVMTQSPDSLAVSLGERATINCKASQDIGNYLNWYQQKPGQTVKLL IYSTSRLHSGVPSRFSGSGSGTDYTLTISSLQAEDVAVYFCQQGNTL PWTFGGGTKVEIK	XXX
vlCDR1	KASQDIGNYLN	XXX
vlCDR2	STSRLHS	XXX
vlCDR3	QQGNTLPWT	XXX

D103388_1C7 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLRQSGPGLGQPSQSLSITCTVFGFSLTNYGVHWVRQSPGKGLEW LGMIWNDGFTDFNAAFISRLSISKDNSKSQVFFKMNSLQPSDTAIYY CASPYFHYAMDYWGQGTSVTVSS	XXX
vhCDR1	GFSLTNYGVH	XXX
vhCDR2	MIWNDGFTDFNAAFIS	XXX
vhCDR3	PYFHYAMDY	XXX
Variable light (vl) domain	QIVLTQSPAIMSASLGERVTMTCTASSSVSSSYLHWYQQKPGSSPKL WIYSTSNLASGVPARFSGSGSGTSYSLTISSMEAEDAATYYCHQYHR SPFTFGSGTKLEIK	XXX
vlCDR1	TASSSVSSSYLH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPFT	XXX

Fig. 21H

D103388_1C7 [MICA/B]_H1L1

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLVQSGAEVKKPGASVKVSCKVSGFSLTNYGVHWVRQAPGQGLEW MGMIWNDGFTDYNAKFQGRVTMTKDNSISTVYMELSRLRSDDTAVYY CASPYFHYAMDYWGQGTTVTVSS	XXX
vhCDR1	GFSLTNYGVH	XXX
vhCDR2	MIWNDGFTDYNAKFQG	XXX
vhCDR3	PYFHYAMDY	XXX
Variable light (vl) domain	QIVLTQSPATLSLSPGERATLSCRASSSVSSSYLHWYQQKPGQSPRL LIYSTSNLASGVPARFSGSGSGTDYTLTISSLEPEDFAVYYCHQYHR SPFTFGSGTKLEIK	XXX
vlCDR1	RASSSVSSSYLH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPFT	XXX

D103388_1C7 [MICA/B]_H1L2

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLVQSGAEVKKPGASVKVSCKVSGFSLTNYGVHWVRQAPGQGLEW MGMIWNDGFTDYNAKFQGRVTMTKDNSISTVYMELSRLRSDDTAVYY CASPYFHYAMDYWGQGTTVTVSS	XXX
vhCDR1	GFSLTNYGVH	XXX
vhCDR2	MIWNDGFTDYNAKFQG	XXX
vhCDR3	PYFHYAMDY	XXX
Variable light (vl) domain	QIVLTQSPFSLSASVGDRVTITCWASSSVSSSYLHWYQQKPAKSPKL FIYSTSNLASGVPARFSGSGSGTDYTLTISSLQPEDFATYYCHQYHR SPFTFGSGTKLEIK	XXX
vlCDR1	WASSSVSSSYLH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPFT	XXX

D103388_1C7 [MICA/B]_H2L1

	sequence	SEQ ID NO:
Variable heavy (vh) domain	EVQLVESGGGLVKPGGSLRLSCAVSGFSLTNYGVHWVRQAPGKGLEW VGMIWNDGFTDYNAPVKGRFTISKDNSKSTVYLQMNSLKTEDTAVYY CASPYFHYAMDYWGQGTTVTVSS	XXX
vhCDR1	GFSLTNYGVH	XXX
vhCDR2	MIWNDGFTDYNAPVKG	XXX
vhCDR3	PYFHYAMDY	XXX
Variable light (vl) domain	QIVLTQSPATLSLSPGERATLSCRASSSVSSSYLHWYQQKPGQSPRL LIYSTSNLASGVPARFSGSGSGTDYTLTISSLEPEDFAVYYCHQYHR SPFTFGSGTKLEIK	XXX
vlCDR1	RASSSVSSSYLH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPFT	XXX

Fig. 21I

D103388_1C7 [MICA/B]_H2L2

	sequence	SEQ ID NO:
Variable heavy (vh) domain	EVQLVESGGGLVKPGGSLRLSCAVSGFSLTNYGVHWVRQAPGKGLEW VGMIWNDGFTDYNAPVKGRFTISKDNSKSTVYLQMNSLKTEDTAVYY CASPYFHYAMDYWGQGTTVTVSS	XXX
vhCDR1	GFSLTNYGVH	XXX
vhCDR2	MIWNDGFTDYNAPVKG	XXX
vhCDR3	PYFHYAMDY	XXX
Variable light (vl) domain	QIVLTQSPFSLSASVGDRVTITCWASSSVSSSYLHWYQQKPAKSPKL FIYSTSNLASGVPARFSGSGSGTDYTLTISSLQPEDFATYYCHQYHR SPFTFGSGTKLEIK	XXX
vlCDR1	WASSSVSSSYLH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPFT	XXX

D103388_1D7 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLQQSGAELMKPGASVKISCKATGYSFTSYYIEWVRQRPGHGLEW IGEIFPGNGDTNYNVNFKGKASLTAYTSSNTVYLQLSSLTSEDSAVY YCTRGHYNMDYWGQGTSVTVSS	XXX
vhCDR1	GYSFTSYYIE	XXX
vhCDR2	EIFPGNGDTNYNVNFKG	XXX
vhCDR3	GHYNMDY	XXX
Variable light (vl) domain	DIQMTQTTSSLSASLGDRVTISCRASQDISNYSNWYQQKPDGSVKLL IYYTSRLHSGVPSRFSGSGSGTDYSLTISNLDQEDIATYFCQQGNTL PRTFGGGTKLEIK	XXX
vlCDR1	RASQDISNYSN	XXX
vlCDR2	YTSRLHS	XXX
vlCDR3	QQGNTLPRT	XXX

D103388_1D7 [MICA/B]_H1L1

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLVQSGAEVKKPGASVKVSCKASGYSFTSYYIEWVRQAPGQGLEW MGEIFPGNGDTNYNVKFQGRVTMTADTSTNTVYMELSSLRSEDTAVY YCTRGHYNMDYWGQGTTVTVSS	XXX
vhCDR1	GYSFTSYYIE	XXX
vhCDR2	EIFPGNGDTNYNVKFQG	XXX
vhCDR3	GHYNMDY	XXX
Variable light (vl) domain	DIQMTQSPSSLSASVGDRVTITCQASQDISNYLNWYQQKPGKSVKLL IYYTSRLHSGVPSRFSGSGSGTDYTFTISSLQPEDIATYFCQQGNTL PRTFGGGTKVEIK	XXX
vlCDR1	QASQDISNYLN	XXX
vlCDR2	YTSRLHS	XXX
vlCDR3	QQGNTLPRT	XXX

Fig. 21J

D103388_1D7 [MICA/B]_H1L2

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLVQSGAEVKKPGASVKVSCKASGYSFTSYYIEWVRQAPGQGLEW MGEIFPGNGDTNYNVKFQGRVTMTADTSTNTVYMELSSLRSEDTAVY YCTRGHYNMDYWGQGTTVTVSS	XXX
vhCDR1	GYSFTSYYIE	XXX
vhCDR2	EIFPGNGDTNYNVKFQG	XXX
vhCDR3	GHYNMDY	XXX
Variable light (vl) domain	DIQMTQSPDSLAVSLGERATINCKASQDISNYLNWYQQKPGQSVKLL IYYTSRLHSGVPSRFSGSGSGTDYTLTISSLQAEDVAVYFCQQGNTL PRTFGGGTKVEIK	XXX
vlCDR1	KASQDISNYLN	XXX
vlCDR2	YTSRLHS	XXX
vlCDR3	QQGNTLPRT	XXX

D103388_1D7 [MICA/B]_H2L1

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLVQSGSELKKPGASVKVSCKASGYSFTSYYIEWVRQAPGQGLEW MGEIFPGNGDTNYNVGFTGRFVFSADTSVNTVYLQISSLKAEDTAVY YCTRGHYNMDYWGQGTTVTVSS	XXX
vhCDR1	GYSFTSYYIE	XXX
vhCDR2	EIFPGNGDTNYNVGFTG	XXX
vhCDR3	GHYNMDY	XXX
Variable light (vl) domain	DIQMTQSPSSLSASVGDRVTITCQASQDISNYLNWYQQKPGKSVKLL IYYTSRLHSGVPSRFSGSGSGTDYTFTISSLQPEDIATYFCQQGNTL PRTFGGGTKVEIK	XXX
vlCDR1	QASQDISNYLN	XXX
vlCDR2	YTSRLHS	XXX
vlCDR3	QQGNTLPRT	XXX

D103388_1D7 [MICA/B]_H2L2

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLVQSGSELKKPGASVKVSCKASGYSFTSYYIEWVRQAPGQGLEW MGEIFPGNGDTNYNVGFTGRFVFSADTSVNTVYLQISSLKAEDTAVY YCTRGHYNMDYWGQGTTVTVSS	XXX
vhCDR1	GYSFTSYYIE	XXX
vhCDR2	EIFPGNGDTNYNVGFTG	XXX
vhCDR3	GHYNMDY	XXX
Variable light (vl) domain	DIQMTQSPDSLAVSLGERATINCKASQDISNYLNWYQQKPGQSVKLL IYYTSRLHSGVPSRFSGSGSGTDYTLTISSLQAEDVAVYFCQQGNTL PRTFGGGTKVEIK	XXX
vlCDR1	KASQDISNYLN	XXX
vlCDR2	YTSRLHS	XXX
vlCDR3	QQGNTLPRT	XXX

Fig. 21K

D105317_1A2 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLKQSGPGLVQPSQSLSITCTVSGFSLTNNGVHWVRQSPGKGLEW LGVIWNVGITDYNAAFISRLSISKDNSKSQVFFKMNSLQGDDTAIYY CARKGGWAMDYWGQGTSVTVSS	XXX
vhCDR1	GFSLTNNGVH	XXX
vhCDR2	VIWNVGITDYNAAFIS	XXX
vhCDR3	KGGWAMDY	XXX
Variable light (vl) domain	QIALTQSPAIMFASLGERVTMTCTASSSVSSSYFHWFQQRPGSSPKL WIYSTSNLASGVPTRFSGSGSGTSYSLTISSMEAEDAATYYCHQYHR SPFTFGSGTKLEIK	XXX
vlCDR1	TASSSVSSSYFH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPFT	XXX

D105317_1A2 [MICA/B]_H1L1

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLVQSGAEVKKPGASVKVSCKVSGFSLTNNGVHWVRQAPGQGLEW MGVIWNVGITDYNAKFQGRVTMTKDNSKSTVYMELSSLRSEDTAVYY CARKGGWAMDYWGQGTLVTVSS	XXX
vhCDR1	GFSLTNNGVH	XXX
vhCDR2	VIWNVGITDYNAKFQG	XXX
vhCDR3	KGGWAMDY	XXX
Variable light (vl) domain	QIALTQSPGTLSLSPGERATLSCRASSSVSSSYFHWFQQKPGQSPRL LIYSTSNLASGVPTRFSGSGSGTDYTLTISRLEPEDFAVYYCHQYHR SPFTFGSGTKLEIK	XXX
vlCDR1	RASSSVSSSYFH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPFT	XXX

D105317_1A2 [MICA/B]_H1L2

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLVQSGAEVKKPGASVKVSCKVSGFSLTNNGVHWVRQAPGQGLEW MGVIWNVGITDYNAKFQGRVTMTKDNSKSTVYMELSSLRSEDTAVYY CARKGGWAMDYWGQGTLVTVSS	XXX
vhCDR1	GFSLTNNGVH	XXX
vhCDR2	VIWNVGITDYNAKFQG	XXX
vhCDR3	KGGWAMDY	XXX
Variable light (vl) domain	QIALTQSPFSLSASVGDRVTITCWASSSVSSSYFHWFQQKPAKSPKL FIYSTSNLASGVPTRFSGSGSGTDYTLTISSLQPEDFATYYCHQYHR SPFTFGSGTKLEIK	XXX
vlCDR1	WASSSVSSSYFH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPFT	XXX

Fig. 21L

D105317_1A2 [MICA/B]_H2L1

	sequence	SEQ ID NO:
Variable heavy (vh) domain	EVQLVESGGGLVKPGGSLRLSCAVSGFSLTNNGVHWVRQAPGKGLEW VGVIWNVGITDYNAPVKGRFTISKDNSKSTVYLQMNSLKTEDTAVYY CARKGGWAMDYWGQGTLVTVSS	XXX
vhCDR1	GFSLTNNGVH	XXX
vhCDR2	VIWNVGITDYNAPVKG	XXX
vhCDR3	KGGWAMDY	XXX
Variable light (vl) domain	QIALTQSPGTLSLSPGERATLSCRASSSVSSSYFHWFQQKPGQSPRL LIYSTSNLASGVPTRFSGSGSGTDYTLTISRLEPEDFAVYYCHQYHR SPFTFGSGTKLEIK	XXX
vlCDR1	RASSSVSSSYFH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPFT	XXX

D105317_1A2 [MICA/B]_H2L2

	sequence	SEQ ID NO:
Variable heavy (vh) domain	EVQLVESGGGLVKPGGSLRLSCAVSGFSLTNNGVHWVRQAPGKGLEW VGVIWNVGITDYNAPVKGRFTISKDNSKSTVYLQMNSLKTEDTAVYY CARKGGWAMDYWGQGTLVTVSS	XXX
vhCDR1	GFSLTNNGVH	XXX
vhCDR2	VIWNVGITDYNAPVKG	XXX
vhCDR3	KGGWAMDY	XXX
Variable light (vl) domain	QIALTQSPFSLSASVGDRVTITCWASSSVSSSYFHWFQQKPAKSPKL FIYSTSNLASGVPTRFSGSGSGTDYTLTISSLQPEDFATYYCHQYHR SPFTFGSGTKLEIK	XXX
vlCDR1	WASSSVSSSYFH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPFT	XXX

D99136_2C11 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	DVQLQESGPGLVKPSQSLSLTCSVTGYSITSGYNWDWIRHSPGNKLE WMGYISYDGSTNYNPSLKNRISITRDTSKNQFFLKLNSVTTEDTATY YCASSYYRYFDYWGQGTTLTVSS	XXX
vhCDR1	GYSITSGYNWD	XXX
vhCDR2	YISYDGSTNYNPSLKN	XXX
vhCDR3	SYYRYFDY	XXX
Variable light (vl) domain	DVQMTQTTSSLSASLGDRVTISCSASQGISNYLNWFQQKPDGTVKLL IYYTSSLHSGVPSRFSGSGSGTDYSLTISNLEPEDIATYYCQQYTKL PWTFGGGTELEIK	XXX
vlCDR1	SASQGISNYLN	XXX
vlCDR2	YTSSLHS	XXX
vlCDR3	QQYTKLPWT	XXX

Fig. 21M

D99136_2C11 [MICA/B]_H1L1

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLQESGPGLVKPSETLSLTCTVSGYSITSGYNWDWIRHPPGKKLE WIGYISYDGSTNYNPSLKSRVTISRDTSKNQFSLKLSSVTAADTAVY YCASSYYRYFDYWGQGTLVTVSS	XXX
vhCDR1	GYSITSGYNWD	XXX
vhCDR2	YISYDGSTNYNPSLKS	XXX
vhCDR3	SYYRYFDY	XXX
Variable light (vl) domain	DVQMTQSPSSLSASVGDRVTITCRASQGISNYLNWFQQKPGKTVKLL IYYTSSLHSGVPSRFSGSGSGTDYTLTISSLQPEDFATYYCQQYTKL PWTFGGGTKVEIK	XXX
vlCDR1	RASQGISNYLN	XXX
vlCDR2	YTSSLHS	XXX
vlCDR3	QQYTKLPWT	XXX

D99136_2C11 [MICA/B]_H1L2

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLQESGPGLVKPSETLSLTCTVSGYSITSGYNWDWIRHPPGKKLE WIGYISYDGSTNYNPSLKSRVTISRDTSKNQFSLKLSSVTAADTAVY YCASSYYRYFDYWGQGTLVTVSS	XXX
vhCDR1	GYSITSGYNWD	XXX
vhCDR2	YISYDGSTNYNPSLKS	XXX
vhCDR3	SYYRYFDY	XXX
Variable light (vl) domain	DVQMTQSPLSLPVTLGQPASISCRASQGISNYLNWFQQRPGQTVRLL IYYTSSLHSGVPSRFSGSGSGTDYTLKISRVEAEDVGVYYCQQYTKL PWTFGGGTKVEIK	XXX
vlCDR1	RASQGISNYLN	XXX
vlCDR2	YTSSLHS	XXX
vlCDR3	QQYTKLPWT	XXX

D99136_2C11 [MICA/B]_H2L1

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLVQSGAEVKKPGASVKVSCKVSGYSITSGYNWDWIRHAPGQKLE WMGYISYDGSTNYNPKFQGRVTMTRDTSINTFYMELSRLRSDDTAVY YCASSYYRYFDYWGQGTLVTVSS	XXX
vhCDR1	GYSITSGYNWD	XXX
vhCDR2	YISYDGSTNYNPKFQG	XXX
vhCDR3	SYYRYFDY	XXX
Variable light (vl) domain	DVQMTQSPSSLSASVGDRVTITCRASQGISNYLNWFQQKPGKTVKLL IYYTSSLHSGVPSRFSGSGSGTDYTLTISSLQPEDFATYYCQQYTKL PWTFGGGTKVEIK	XXX
vlCDR1	RASQGISNYLN	XXX
vlCDR2	YTSSLHS	XXX
vlCDR3	QQYTKLPWT	XXX

Fig. 21N

D99136_2C11 [MICA/B]_H2L2

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLVQSGAEVKKPGASVKVSCKVSGYSITSGYNWDWIRHAPGQKLE WMGYISYDGSTNYNPKFQGRVTMTRDTSINTFYMELSRLRSDDTAVY YCASSYYRYFDYWGQGTLVTVSS	XXX
vhCDR1	GYSITSGYNWD	XXX
vhCDR2	YISYDGSTNYNPKFQG	XXX
vhCDR3	SYYRYFDY	XXX
Variable light (vl) domain	DVQMTQSPLSLPVTLGQPASISCRASQGISNYLNWFQQRPGQTVRLL IYYTSSLHSGVPSRFSGSGSGTDYTLKISRVEAEDVGVYYCQQYTKL PWTFGGGTKVEIK	XXX
vlCDR1	RASQGISNYLN	XXX
vlCDR2	YTSSLHS	XXX
vlCDR3	QQYTKLPWT	XXX

D103388_1B11-2 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVHLNQSGPGLVQPSQSLSITCTVSGFSLTNYGVHWIRQSPGKGLEW LGVIWNVGITDYNAAFVSRLSITKDNSKSQVFFKLNSLQTIDTAIYY CARKGGIAMDYWGQGTSVTVSS	XXX
vhCDR1	GFSLTNYGVH	XXX
vhCDR2	VIWNVGITDYNAAFVS	XXX
vhCDR3	KGGIAMDY	XXX
Variable light (vl) domain	QIVLTQSPAIMSASLGDRVTMTCTASSSVSSTYLHWYQQKPGSSPKL WIYSTSNLASGVPARFSGSGSGTSYSLTISSLEAEDSTTYYCHQYHR SPFTFGSGTKLEIK	XXX
vlCDR1	TASSSVSSTYLH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPFT	XXX

D105317_1B6 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLKQSGPGLVQPSQSLSLTCTVSGFSLSNFGVHWVRQSPGKGLEW LGVIWNVGITDFNAAFISRLSISKDNSKSQVFFKMNSLQVDDTAIYY CARKGPYAMDYWGQGTSVTVSS	XXX
vhCDR1	GFSLSNFGVH	XXX
vhCDR2	VIWNVGITDFNAAFIS	XXX
vhCDR3	KGPYAMDY	XXX
Variable light (vl) domain	QIVLTQSPAIMSASLGERVTMTCTASSSVSSSYLHWYQQKPGSSPKL WISSTSNLASGVPGRFSGSGSGTSYSLTISSMEAEDAATYYCHQYHR SPFTFGSGTKLEIK	XXX
vlCDR1	TASSSVSSSYLH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPFT	XXX

Fig. 21O

D105317_1C8 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLKQSGPGLVQPSQSLSFTCTVSGFSLTNYGVHWVRQSPGKGLEW LGVIWNSGTTDYNAAFISRLSINKDNSKSQVFFKMNSLQADDTAIYY CARKGSYAMDYWGQGTSVTVSS	XXX
vhCDR1	GFSLTNYGVH	XXX
vhCDR2	VIWNSGTTDYNAAFIS	XXX
vhCDR3	KGSYAMDY	XXX
Variable light (vl) domain	QIVLTQSPAIMSASLGERVTMTCTASSSVSSIYLHWYQQKPGSSPKL WISSTSNLASGVPARFNGSGSGTSYSLTVSNMEAEDAATYYCHQYHR SPFTFGSGTKLDIK	XXX
vlCDR1	TASSSVSSIYLH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPFT	XXX

D105317_1F6 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLKQSGPGLVQPSQSLSITCTVSGFSLTNYGVHWVRQSPGKGLEW LGVIWSGGITDYNAAFISRLSISKDNSKSQVFFKMNSLQADDTAIYY CARRGGYAMDYWGQGTSVTVSS	XXX
vhCDR1	GFSLTNYGVH	XXX
vhCDR2	VIWSGGITDYNAAFIS	XXX
vhCDR3	RGGYAMDY	XXX
Variable light (vl) domain	QIVLTQSPAIMSASLGERVTMTCTASSSVSSSYLHWYQQKPGSSPKL WIYSTSNLASGVPARFSGSGSGTSYSLTINTMEAEDAATYYCHQYHR SPFTFGSGTKLEIK	XXX
vlCDR1	TASSSVSSSYLH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPFT	XXX

D105317_1F7 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	DIQLQESGPGLVKPSQSLSLTCSVTGYSITSGYYWNWIRQFPGNKLE WMGYIRYDGRNNYNPSLKNRISITRDTSKNQFFLRLNSVTTEDTATY YCASSFHYYAMDYWGQGTSVTVSS	XXX
vhCDR1	GYSITSGYYWN	XXX
vhCDR2	YIRYDGRNNYNPSLKN	XXX
vhCDR3	SFHYYAMDY	XXX
Variable light (vl) domain	DIVLTQSPGSLSVSPGQRATISCRASESVDSYGDSFLHWYQQKPGQS PKLLIYRASNLESGIPARFSGSGSRTDFTLTINPIEADDVATYYCQQ SNEDPWTFGGGTNLEIK	XXX
vlCDR1	RASESVDSYGDSFLH	XXX
vlCDR2	RASNLES	XXX
vlCDR3	QQSNEDPWT	XXX

Fig. 21P

D94837_1D3 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLRQSGPGLGQPSQSLSITCTVSGFSLTNHGVHWVRQSLGKGLEW LGVIWNNGITDYNADFISRLSITKDNSKSQVFFKMSSLQANDTAIYY CARKGSYAMDYWGQGSSVTVSS	XXX
vhCDR1	GFSLTNHGVH	XXX
vhCDR2	VIWNNGITDYNADFIS	XXX
vhCDR3	KGSYAMDY	XXX
Variable light (vl) domain	QIVLTQSPAIMSASLGERVTMTCTASSSVSSSYFHWYQQKPGSSPKL WIYSTSNLASGVPARFSGSGSGTSYSLTISSMEAEDAATYYCHQYHR SPWTFGGGTKLEIK	XXX
vlCDR1	TASSSVSSSYFH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPWT	XXX

D94837_1D8 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLKQSGPGLVQPSQSLSITCTVFGFSLTNYGVHWVRQSPGKGLEW LGVIWSDGYTDYYAAFVSRLSISKDNSKSQVFFKMNSLQADDTAIYY CARKGGDPYAMDYWGQGTSVTVSS	XXX
vhCDR1	GFSLTNYGVH	XXX
vhCDR2	VIWSDGYTDYYAAFVS	XXX
vhCDR3	KGGDPYAMDY	XXX
Variable light (vl) domain	QIVLTQSPAIMSASLGERVTMTCTASSSVSSSYLHWYQQKPGSSPKL WIFSTSNLASGVPARFSGSGSGTSYSLTISSMEAEDAATYYCHQYHR SPFTFGSGTKLEIK	XXX
vlCDR1	TASSSVSSSYLH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPFT	XXX

D94837_1D9 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLQQSGAELVRPGTSVKMSCKAAGYTFTNYWIGWVKQRPGHGLEW IGDIYPGGDYTNYNGKFKARATLTADTSASTAYMHLSSLTSEDSAIY YCARRNHYPYVMDDWGQGTSVTVSS	XXX
vhCDR1	GYTFTNYWIG	XXX
vhCDR2	DIYPGGDYTNYNGKFKA	XXX
vhCDR3	RNHYPYVMDD	XXX
Variable light (vl) domain	QIVLTQSPAIMSASLGERVTMTCTASSSVSSSYLHWYQQKPGSSPKL WIYSTSNLASGVPPRFSGSGSGTSYSLTISSMEAEDAATYYCHQYHR SPWTFGGGTKLEIK	XXX
vlCDR1	TASSSVSSSYLH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPWT	XXX

Fig. 21Q

D94837_1E1 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLKQSGPGLVQPSQSLSITCTVSGFSLTNYGVHWVRQSPGKGLEW LGVIWNVGITDYNAAFISRLSISKDNSKSQVFLKMNSLQADDTAIYY CARKGSYAMDYWGQGTSVTVSS	XXX
vhCDR1	GFSLTNYGVH	XXX
vhCDR2	VIWNVGITDYNAAFIS	XXX
vhCDR3	KGSYAMDY	XXX
Variable light (vl) domain	QIVLTQSPAIMSASLGERVTMTCTASSSVSSSYLHWYHQKPGSSPTL WIYSTSNLASGVPTRFSGSGSGTSYSLTISSMEAEDAATYYCHQYHR SPFTFGSGTKLEIK	XXX
vlCDR1	TASSSVSSSYLH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPFT	XXX

D94852_2D4 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLKESGPGLVAPSQSLSITCTVSGFSLTSYGVHWVRQPPGKGLEW LGVIWTGGNTNYNSAFMSRVSISKDNSKSQVFLKMNSLQTDDTAMYY CARFQYDYDVAYWGQGTLVTVSA	XXX
vhCDR1	GFSLTSYGVH	XXX
vhCDR2	VIWTGGNTNYNSAFMS	XXX
vhCDR3	FQYDYDVAY	XXX
Variable light (vl) domain	QIVLTQSPAIMSASLGERVTVTCTASSSVSSSFLHWYQQKPGSSPKL WIYSTSNLASGVPARFSGSGSGTSYSLTISSMEAEDAATYYCHQYHR SPFTFGSGTKLEIK	XXX
vlCDR1	TASSSVSSSFLH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPFT	XXX

D94852_2G8 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLKQSGPGLVQPSQSLSITCTVSGFSLTNYGVHWVRQSPGKGLEW LGVIWSGGNTDYNAAFISRLSISKDNSKSQVFFKMNSLQPNDTALFY CARGTYTYGFDYWGQGTLVTVSA	XXX
vhCDR1	GFSLTNYGVH	XXX
vhCDR2	VIWSGGNTDYNAAFIS	XXX
vhCDR3	GTYTYGFDY	XXX
Variable light (vl) domain	QIVLTQSPAIMSASLGERVTMTCTASSSVSSSYLHWYQQKPGSSPKL WIYSTSNLASGVPARFSGSGSGTSYSLTISSMEAEDAATYYCHQYHR SPWTFGGGTKLEIK	XXX
vlCDR1	TASSSVSSSYLH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPWT	XXX

Fig. 21R

D88487_2A8 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLKQSGPGLVQPSQSLSITCTVSGFSLIKYGVHWVRQFPGKGLEW LGVIWNEGYTDYYAAFISRLSISKDNSKSQVFFKMNSLQANDTAIYY CARKGGDPYAMDYWGQGTSVTVSS	XXX
vhCDR1	GFSLIKYGVH	XXX
vhCDR2	VIWNEGYTDYYAAFIS	XXX
vhCDR3	KGGDPYAMDY	XXX
Variable light (vl) domain	QIVLTQSPAIMSASLGERVTMTCTASSSVSSSYLHWFQQKPGSSPKL WIYSTSNLASGVPARFSGSGSGTSYSLTISSMEAEDAVTYYCHQYHR SPFTFGSGTKLEIK	XXX
vlCDR1	TASSSVSSSYLH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPFT	XXX

D94837_3B12 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLQQSGAELAKPGASVKMSCKASGYTFTSYWMHWVKQRPGQGLEW IGYINPNTGYTEYNQKFKDKATLTADRSSSTAYMQLSSLTSEDSAVY YCARTYDYDGAYWGQGTLVTVSS	XXX
vhCDR1	GYTFTSYWMH	XXX
vhCDR2	YINPNTGYTEYNQKFKD	XXX
vhCDR3	TYDYDGAY	XXX
Variable light (vl) domain	QIVLTQSPAIMSASPGESVTMTCSASSSVSYMSWYQQKPGSSPRLLI YGTSNLASGVPVRFSGSGSGTSYSLTISRMEAEDAATYYCQQWSSYP LTFGAGTKLELK	XXX
vlCDR1	SASSSVSYMS	XXX
vlCDR2	GTSNLAS	XXX
vlCDR3	QQWSSYPLT	XXX

D99122_1H7 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLQQSGAELARPGASVKLSCKASGYTFISYGISWVKQRTGQGLEW IGEIYPRSGNTYYNEKFKGKATLTADKSSSTAYMEVRSLTSEDSAVY FCASNWDEKVYWGQGTTLTVSS	XXX
vhCDR1	GYTFISYGIS	XXX
vhCDR2	EIYPRSGNTYYNEKFKG	XXX
vhCDR3	NWDEKVY	XXX
Variable light (vl) domain	DIVLTQSPASLAVSLGQRATISCRASKSVDNYGISFMHWFQQKPGQP PKLLIYAASNQGSGVPARFSGSGSGTDFSLNIHPLEGDDTAMYFCQQ SREFPWTFGGGTKLEIR	XXX
vlCDR1	RASKSVDNYGISFMH	XXX
vlCDR2	AASNQGS	XXX
vlCDR3	QQSREFPWT	XXX

Fig. 21S

D99136_2E8 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVHLQQSGAELARPGASVKLSCKASGYTFISYGISWVKQGTGQGLEW IGEIYPRSGTTYYNEKFKVKATLTADKSSSTAYLELRSLTSEDSAVY FCASNWDEKVYWGQGTTLTVSS	XXX
vhCDR1	GYTFISYGIS	XXX
vhCDR2	EIYPRSGTTYYNEKFKV	XXX
vhCDR3	NWDEKVY	XXX
Variable light (vl) domain	DIVLTQSPASLAVSLGQRATISCRASESVDNYGISFMHWFQQKPGQP PKLLIYAASNQGSGVPARFSGSGSGTDFSLNIHPLEEDDTAMYFCQQ SRKLPWTFGGGTKLEIR	XXX
vlCDR1	RASESVDNYGISFMH	XXX
vlCDR2	AASNQGS	XXX
vlCDR3	QQSRKLPWT	XXX

D88487_2A8 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLKQSGPGLVQPSQSLSITCTVSGFSLIKYGVHWVRQFPGKGLEW LGVIWNEGYTDYYAAFISRLSISKDNSKSQVFFKMNSLQANDTAIYY CARKGGDPYAMDYWGQGTSVTVSS	XXX
vhCDR1	GFSLIKYGVH	XXX
vhCDR2	VIWNEGYTDYYAAFIS	XXX
vhCDR3	KGGDPYAMDY	XXX
Variable light (vl) domain	QIVLTQSPAIMSASLGERVTMTCTASSSVSSSYLHWFQQKPGSSPKL WIYSTSNLASGVPARFSGSGSGTSYSLTISSMEAEDAVTYYCHQYHR SPFTFGSGTKLEIK	XXX
vlCDR1	TASSSVSSSYLH	XXX
vlCDR2	STSNLAS	XXX
vlCDR3	HQYHRSPFT	XXX

Fig. 22 Fig. 22A

3F9[MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	EVQLQESGEGLVKPGGSLKLSCAASGFTFSNYAMSWVRQTPEKRLEW VAYISPGGDYIYYADTVKGRFTISRDNARNTLYLQMSSLKSEDTAMY YCTTDRRHYGSYAMDYWGQGISVTVSS	XXX
vhCDR1	NYAMS	XXX
vhCDR2	YISPGGDYIYYADTVKG	XXX
vhCDR3	DRRHYGSYAMDY	XXX
Variable light (vl) domain	DIVMTQAAPSVPVTPGESVSISCRSSKSLLHSNGNTYLYWFLQRPGQ SPQLLIYRMSNLASGVPDRFSGSGSGTAFTLRISRVEAEDVGVYYCM QHLEYPFTFGSGTKLEIK	XXX
vlCDR1	RSSKSLLHSNGNTYLY	XXX
vlCDR2	RMSNLAS	XXX
vlCDR3	MQHLEYPFT	XXX

6E1[MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QGQMQQSGAELVKPGASVKLSCKTSGFTFSDNYISWLKQKPGQSLEW IAWIYAGTGGSSYNQKFRDKAQLTVDTSSRTAYMQLSSLTTEDSAIY YCARHDYYGTSGAWFAYWGRGTLVTVSA	XXX
vhCDR1	DNYIS	XXX
vhCDR2	WIYAGTGGSSYNQKFRD	XXX
vhCDR3	HDYYGTSGAWFAY	XXX
Variable light (vl) domain	DVLMTQTPLSLPVSLGDQASISCRSSQHIVHSNENTYLEWYLQKPGQ SPKLLIYKVSNRFSGVPDRFSGSGSGTDFTLKISRVEAEDLGVYYCF QGSHVPWTFGGGTKLEIK	XXX
vlCDR1	RSSQHIVHSNENTYLE	XXX
vlCDR2	KVSNRFS	XXX
vlCDR3	FQGSHVPWT	XXX

7C6[MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKW MGWINTHTGDPTYADDFKGRIAFSLETSASTAYLQINNLKNEDTATY FCVRTYGNYAMDYWGQGTSVTVSS	XXX
vhCDR1	NYAMN	XXX
vhCDR2	WINTHTGDPTYADDFKG	XXX
vhCDR3	TYGNYAMDY	XXX
Variable light (vl) domain	DIQMTQTTSSLSASLGDRVTISCSASQDISNYLNWYQQKPDGTVKLL IYDTSILHLGVPSRFSGSGSGTDYSLTISNLEPEDIATYYCQQYSKF PRTFGGGTTLEIK	XXX
vlCDR1	SASQDISNYLN	XXX
vlCDR2	DTSILHL	XXX
vlCDR3	QQYSKFPRT	XXX

Fig. 22B

13A9 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLQQSGAELVRPGTSVKVSCKASGYAFTNYLIEWVKQRPGQGLEW IGAINPGSGATNYNEKFKDKARLTADKSSNTAYLQFSSLTSDDSAVY FCARFLGNYFDNWGQGATLTVSS	XXX
vhCDR1	GYAFTNYLIE	XXX
vhCDR2	AINPGSGATNYNEKFKD	XXX
vhCDR3	FLGNYFDN	XXX
Variable light (vl) domain	DIQMTQSPASLSASVGETVTITCRASGNIHSYLAWYQQKQGKSPQLL VYYAETLADGVPSRFSGRGSGTQYSLKINSLQPEDFGSYFCQQFWTT PYTFGGGTKVEIK	XXX
vlCDR1	RASGNIHSYLA	XXX
vlCDR2	YAETLAD	XXX
vlCDR3	QQFWTTPYT	XXX

1D5 [MICA/B]_H0L0

	sequence	SEQ ID NO:
Variable heavy (vh) domain	EIQLQQSGPELVKPGASVKVSCKASGYAFTSQNIYWVKQSHGKSLEW IGYIEPYNVVPMYNPKFKGKATLTVDKSSSSAYIHLNSLTSEDSAIY YCARSGSSNFDYWGQGTTLTVSS	XXX
vhCDR1	GYAFTSQNIY	XXX
vhCDR2	YIEPYNVVPMYNPKFKG	XXX
vhCDR3	SGSSNFDY	XXX
Variable light (vl) domain	EIILTQSPTTMAASPGEKITITCSASSSISSHYLHWYQQKSGFSPKL LIYRTSNLASGVPARFSGSGSGTSYSLTIGTMEAEDVATYYCQQGSS LPLTFGAGTKVEIK	XXX
vlCDR1	SASSSISSHYLH	XXX
vlCDR2	RTSNLAS	XXX
vlCDR3	QQGSSLPLT	XXX

Fig. 23

2C10A3.372[NKp46]_H1L1

	sequence	**SEQ ID NO:**
Variable heavy (vh) domain	QVQLVQSGAEVKKPGSSVKVSCKASGGTFSNYAIHWVRQAPGQGLEW MGGIIPIFGLANYAQKFQGRVTITADESTSTAYMELSSLRSEDTAVY YCARRGALWGNAFDYWGQGTLVTVSS	XXX
vhCDR1	GGTFSNYAIH	XXX
vhCDR2	GIIPIFGLANYAQKFQG	XXX
vhCDR3	RGALWGNAFDY	XXX
Variable light (vl) domain	DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLL IYAASSLQSGVPSRFSGSGSGTDFTLTISSLQPEDFATYYCQQSYST PYTFGQGTKLEIK	XXX
vlCDR1	RASQSISSYLN	XXX
vlCDR2	AASSLQS	XXX
vlCDR3	QQSYSTPYT	XXX

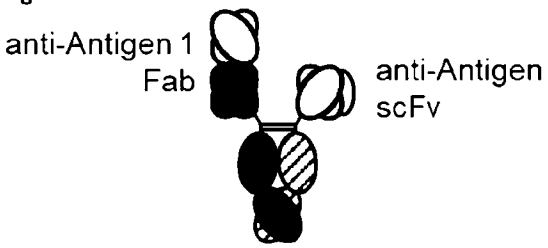
Fig. 24

NKp46-A[NKp46]

	sequence	SEQ ID NO:
Variable heavy (vh) domain	QVQLVQSGAEVKKPGASVKVSCKASGYTFTSFTMHWVRQAPGQGLEW IGYINPSSGYTEYNQKFKDRVTITADKSTSTAYMELSSLRSEDTAVY YCVRGSSRGFDYWGQGTLVTVSS	XXX
vhCDR1	GYTFTSFTMH	XXX
vhCDR2	YINPSSGYTEYNQKFKD	XXX
vhCDR3	GSSRGFDY	XXX
Variable light (vl) domain	DIQMTQSPSSLSASVGDRVTITCRASENIYSNLAWFQQKPGKAPKLL VYAATNLADGVPSRFSGSGSGTDYTLTISSLQPEDFATYYCQHFWGT PRTFGGGTKVEIK	XXX
vlCDR1	RASENIYSNLA	XXX
vlCDR2	AATNLAD	XXX
vlCDR3	QHFWGTPRT	XXX

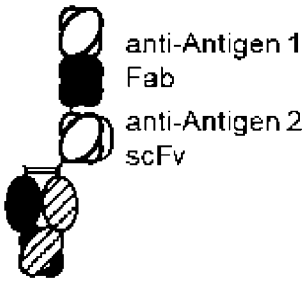
Fig. 25

Fig. 25A



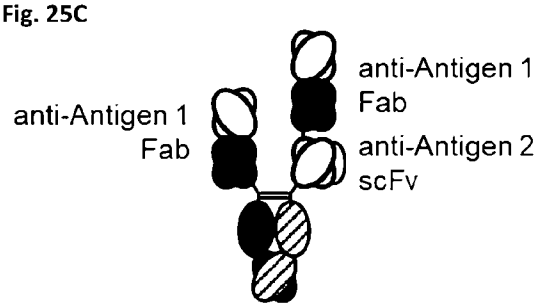
1 + 1 Fab x scFv

Fig. 25B



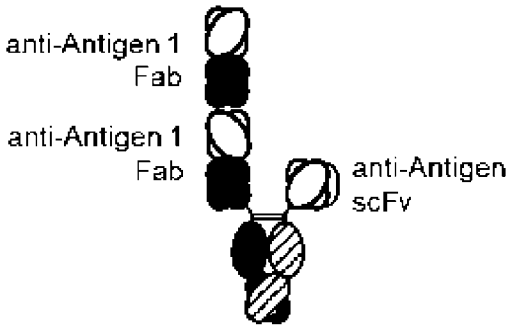
1 + 1 empty x Fab-scFv

Fig. 25C



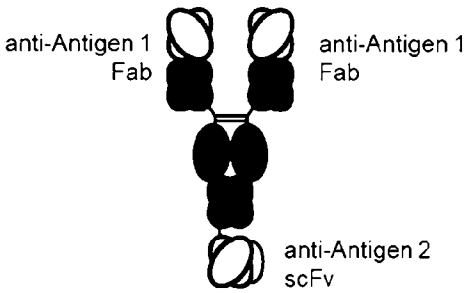
2 + 1 Fab x Fab-scFv

Fig. 25D



2 + 1 Fab2 x scFv

Fig. 25E



2 + 1 mAb-scFv

Fig. 26

Fig. 26A

>XENP47441 7C6[MICA/B]_H0L0_Fab_(G4S)2_7C6[MICA/B]_H0L0_Fab-Numax[RSV]_H1L1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S-Fc(216)_IgG1_C220S/S364K/E357Q

Chain 1 - 7C6[MICA/B]_H0_IgG1_pI(-)_Isosteric_A_L368D/K370S (SEQ ID NO: XXX)

QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGRIAFSLETS
ASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKD
YFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCGGG
GSGGGGS/QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGR
IAFSLETSASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSS/ASTKGPSVFPLAPSSKSTSGGTA
ALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKV
EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTK
PREEEYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL
TCDVSGFYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKS
LSLSPGK

Chain 2 - 7C6[MICA/B]_H0_Numax[RSV]_H1L1_scFv(GKPGS)4_Fc(216)_IgG1_C220S/S364K/E357Q (SEQ ID NO: XXX)

QVTLRESGPALVKPTQTLTLTCTFSGFSLSTAGMSVGWIRQPPGKALEWLADIWWDDKKHYNPSLKDRLTISKDT
SKNQVVLKVTNMDPADTATYYCARDMIFNFYFDVWGQGTTVTVSS/GKPGSGKPGSGKPGSGKPGS/DIQMTQSP
STLSASVGDRVTITCSASSRVGYMHWYQQKPGKAPKLLIYDTSKLASGVPSRFSGSGSGTEFTLTISSLQPDDFA
TYYCFQGSGYPFTFGGGTKVEIK/EPKSSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDV
SHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKG
QPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSR
WQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 7C6[MICA/B]_L0 Light Chain (SEQ ID NO: XXX)

DIQMTQTTSSLSASLGDRVTISCSASQDISNYLNWYQQKPDGTVKLLIYDTSILHLGVPSRFSGSGSGTDYSLTI
SNLEPEDIATYYCQQYSKFPRTFGGGTTLEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWK
VDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

>XENP40894_7C6[MICA/B]_H0_L0_IgG1

Heavy Chain (SEQ ID NO: XXX)

QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGRIAFSLETS
ASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTH
TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYP
SDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Light Chain (SEQ ID NO: XXX)

DIQMTQTTSSLSASLGDRVTISCSASQDISNYLNWYQQKPDGTVKLLIYDTSILHLGVPSRFSGSGSGTDYSLTI
SNLEPEDIATYYCQQYSKFPRTFGGGTTLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKV
DNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 26B

>XENP47444_7C6[MICAB]_H0L0_Fab-7C6[MICAB]_H0L0_Fab-IgG1_pI(-)_Isosteric_A_PVA_/S267K/L368D/K370S-IgG1_PVA_/S267K/S364K/E357Q/K447del_(G4S)3_Numax[RSV]_H1L1_scFv(GKPGS)4

Chain 1 - 7C6[MICAB]_H0_IgG1_pI(-)_Isosteric_A_PVA_/S267K/L368D/K370S (SEQ ID NO: XXX)

QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGRIAFSLETS
ASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKTH
TCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTY
RVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPS
DIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 7C6[MICAB]_H0_IgG1_PVA_/S267K/S364K/E357Q/K447del_(G4S)3_Numax[RSV]_H1L1_scFv(GKPGS)4 (SEQ ID NO: XXX)

QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGRIAFSLETS
ASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTH
TCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTY
RVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPS
DIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGGG
SGGGGSGGGGSQVTLRESGPALVKPTQTLTLTCTFSGFSLSTAGMSVGWIRQPPGKALEWLADIWWDDKKHYNPS
LKDRLTISKDTSKNQVVLKVTNMDPADTATYYCARDMIFNFYFDVWGQGTTVTVSSGKPGSGKPGSGKPGSGKPG
SDIQMTQSPSTLSASVGDRVTITCSASSRVGYMHWYQQKPGKAPKLLIYDTSKLASGVPSRFSGSGSGTEFTLTI
SSLQPDDFATYYCFQGSGYPFTFGGGTKVEIK

Chain 3 - 7C6[MICAB]_L0 (SEQ ID NO: XXX)

DIQMTQTTSSLSASLGDRVTISCSASQDISNYLNWYQQKPDGTVKLLIYDTSILHLGVPSRFSGSGSGTDYSLTI
SNLEPEDIATYYCQQYSKFPRTFGGGTTLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKV
DNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

>XENP47445_7C6[MICAB]_H0L0_Fab-7C6[MICAB]_H0L0_Fab-IgG1_pI(-)_Isosteric_A_L368D/K370S-IgG1_S364K/E357Q/K447del_(G4S)3_Numax[RSV]_H1L1_scFv(GKPGS)4

Chain 1 - 7C6[MICAB]_H0_IgG1_pI(-)_Isosteric_A_L368D/K370S (SEQ ID NO: XXX)

QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGRIAFSLETS
ASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKTH
TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 7C6[MICAB]_H0_IgG1_S364K/E357Q/K447del_(G4S)3_Numax[RSV]_H1L1_scFv(GKPGS)4 (SEQ ID NO: XXX)

QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGRIAFSLETS
ASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTH
TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYP
SDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGG
GSGGGGSGGGGSQVTLRESGPALVKPTQTLTLTCTFSGFSLSTAGMSVGWIRQPPGKALEWLADIWWDDKKHYNP
SLKDRLTISKDTSKNQVVLKVTNMDPADTATYYCARDMIFNFYFDVWGQGTTVTVSSGKPGSGKPGSGKPGSGKP
GSDIQMTQSPSTLSASVGDRVTITCSASSRVGYMHWYQQKPGKAPKLLIYDTSKLASGVPSRFSGSGSGTEFTLT
ISSLQPDDFATYYCFQGSGYPFTFGGGTKVEIK

Chain 3 - 7C6[MICAB]_L0 (SEQ ID NO: XXX)

DIQMTQTTSSLSASLGDRVTISCSASQDISNYLNWYQQKPDGTVKLLIYDTSILHLGVPSRFSGSGSGTDYSLTI
SNLEPEDIATYYCQQYSKFPRTFGGGTTLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKV
DNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 27

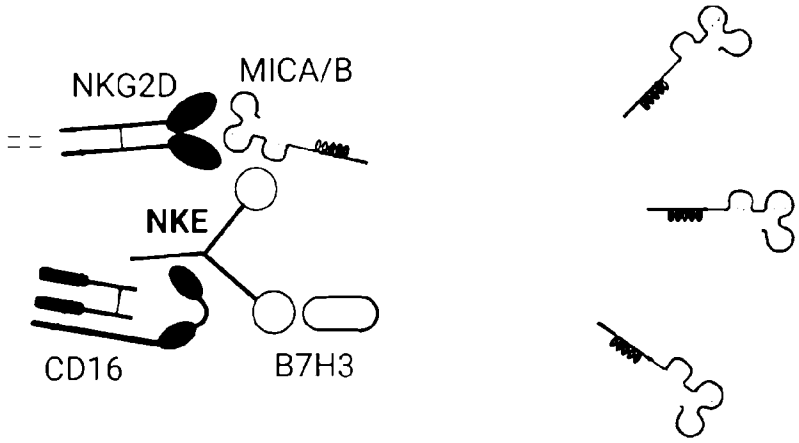


Fig. 28 Fig. 28A

>XENP41021 38E2[B7H3]_H2_L1.1_Fab-38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S-Fc(216)_IgG1_C220S/S364K/E357Q

Chain 1 - 38E2[B7H3]_H2_IgG1_pI(-)_Isosteric_A_L368D/K370S-Fc(216)_IgG1_C220S/S364K/E357Q (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKTH
TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 38E2[B7H3]_H2_L1.1_scFv(GKPGS)4_IgG1_C220S/S364K/E357Q (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIVMTQSPSSLSA
SVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTISSLQPEDFATYYC
QNNYGIIAAGATFGGGTKVEIK/EPKSSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVS
HEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQ
PREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW
QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 38E2[B7H3]_L1.1_Light Chain (SEQ ID NO: XXX)

DIVMTQSPSSLSASVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTI
SSLQPEDFATYYCQNNYGIIAAGATFGGGTKVEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKV
QWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

>XENP41022 38E2[B7H3]_H2_L1.1_Fab-38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_S239D/I332E/L368D/K370S-Fc(216)_IgG1_C220S/S239D/I332E/S364K/E357Q

Chain 1 - 38E2[B7H3]_H2_IgG1_pI(-)_Isosteric_A_S239D/I332E/L368D/K370S (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKTH
TCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-Fc(216)_IgG1_C220S/S239D/I332E/S364K/E357Q (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIVMTQSPSSLSA
SVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTISSLQPEDFATYYC
QNNYGIIAAGATFGGGTKVEIK/EPKSSDKTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVS
HEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQ
PREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW
QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 38E2[B7H3]_L1.1_Light Chain (SEQ ID NO: XXX)

DIVMTQSPSSLSASVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTI
SSLQPEDFATYYCQNNYGIIAAGATFGGGTKVEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKV
QWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 28B

>XENP41023 38E2[B7H3]_H2_L1.1_Fab-38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S/S239D-Fc(216)_IgG1_C220S/S364K/E357Q/S239D

Chain 1 - 38E2[B7H3]_H2_IgG1_pI(-)_Isosteric_A_L368D/K370S/S239D (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKTH
TCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-Fc(216)_IgG1_C220S/S364K/E357Q/S239D (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIVMTQSPSSLSA
SVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTISSLQPEDFATYYC
QNNYGIIAAGATFGGGTKVEIK/EPKSSDKTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVS
HEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQ
PREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW
QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 38E2[B7H3]_L1.1_Light Chain (SEQ ID NO: XXX)

DIVMTQSPSSLSASVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTI
SSLQPEDFATYYCQNNYGIIAAGATFGGGTKVEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKV
QWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

>XENP41024 38E2[B7H3]_H2_L1.1_Fab-38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S/I332E-Fc(216)_IgG1_C220S/S364K/E357Q/I332E

Chain 1 - 38E2[B7H3]_H2_IgG1_pI(-)_Isosteric_A_L368D/K370S/I332E (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKTH
TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-Fc(216)_IgG1_C220S/S364K/E357Q/I332E (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIVMTQSPSSLSA
SVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTISSLQPEDFATYYC
QNNYGIIAAGATFGGGTKVEIK/EPKSSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVS
HEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQ
PREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW
QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 38E2[B7H3]_L1.1_Light Chain (SEQ ID NO: XXX)

DIVMTQSPSSLSASVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTI
SSLQPEDFATYYCQNNYGIIAAGATFGGGTKVEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKV
QWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 28C

>XENP41025 38E2[B7H3]_H2_L1.1_Fab-38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S-Fc(216)_IgG1_C220S/S239D/I332E/S364K/E357Q

Chain 1 - 38E2[B7H3]_H2_IgG1_pI(-)_Isosteric_A_L368D/K370S (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKTH
TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-Fc(216)_IgG1_C220S/S239D/I332E/S364K/E357Q (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIVMTQSPSSLSA
SVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTISSLQPEDFATYYC
QNNYGIIAAGATFGGGTKVEIK/EPKSSDKTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVS
HEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQ
PREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW
QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 38E2[B7H3]_L1.1_Light Chain (SEQ ID NO: XXX)

DIVMTQSPSSLSASVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTI
SSLQPEDFATYYCQNNYGIIAAGATFGGGTKVEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKV
QWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

>XENP41026 38E2[B7H3]_H2_L1.1_Fab-38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S-Fc(216)_IgG1_C220S/S364K/E357Q/S239D

Chain 1 - 38E2[B7H3]_H2_IgG1_pI(-)_Isosteric_A_L368D/K370S (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKTH
TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-Fc(216)_IgG1_C220S/S364K/E357Q/S239D (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIVMTQSPSSLSA
SVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTISSLQPEDFATYYC
QNNYGIIAAGATFGGGTKVEIK/EPKSSDKTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVS
HEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQ
PREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW
QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 38E2[B7H3]_L1.1_Light Chain (SEQ ID NO: XXX)

DIVMTQSPSSLSASVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTI
SSLQPEDFATYYCQNNYGIIAAGATFGGGTKVEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKV
QWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 28D

>XENP41027 38E2[B7H3]_H2_L1.1_Fab-38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S-Fc(216)_IgG1_C220S/S364K/E357Q/I332E

Chain 1 - 38E2[B7H3]_H2_IgG1_pI(-)_Isosteric_A_L368D/K370S (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKTH
TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-Fc(216)_IgG1_C220S/S364K/E357Q/I332E (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIVMTQSPSSLSA
SVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTISSLQPEDFATYYC
QNNYGIIAAGATFGGGTKVEIK/EPKSSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVS
HEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQ
PREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW
QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 38E2[B7H3]_L1.1_Light Chain (SEQ ID NO: XXX)

DIVMTQSPSSLSASVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTI
SSLQPEDFATYYCQNNYGIIAAGATFGGGTKVEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKV
QWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

>XENP41028 38E2[B7H3]_H2_L1.1_Fab-38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_S239D/I332E/L368D/K370S-Fc(216)_IgG1_C220S/S364K/E357Q

Chain 1 - 38E2[B7H3]_H2_IgG1_pI(-)_Isosteric_A_S239D/I332E/L368D/K370S (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKTH
TCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-Fc(216)_IgG1_C220S/S364K/E357Q (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIVMTQSPSSLSA
SVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTISSLQPEDFATYYC
QNNYGIIAAGATFGGGTKVEIK/EPKSSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVS
HEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQ
PREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW
QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 38E2[B7H3]_L1.1_Light Chain (SEQ ID NO: XXX)

DIVMTQSPSSLSASVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTI
SSLQPEDFATYYCQNNYGIIAAGATFGGGTKVEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKV
QWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 28E

>XENP41029 38E2[B7H3]_H2_L1.1_Fab-38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S/S239D-Fc(216)_IgG1_C220S/S364K/E357Q

Chain 1 - 38E2[B7H3]_H2_IgG1_pI(-)_Isosteric_A_L368D/K370S/S239D (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKTH
TCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-Fc(216)_IgG1_C220S/S364K/E357Q (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIVMTQSPSSLSA
SVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTISSLQPEDFATYYC
QNNYGIIAAGATFGGGTKVEIK/EPKSSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVS
HEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQ
PREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW
QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 38E2[B7H3]_L1.1_Light Chain (SEQ ID NO: XXX)

DIVMTQSPSSLSASVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTI
SSLQPEDFATYYCQNNYGIIAAGATFGGGTKVEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKV
QWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

>XENP41030 38E2[B7H3]_H2_L1.1_Fab-38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S/I332E-Fc(216)_IgG1_C220S/S364K/E357Q

Chain 1 - 38E2[B7H3]_H2_IgG1_pI(-)_Isosteric_A_L368D/K370S/I332E (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKTH
TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-Fc(216)_IgG1_C220S/S364K/E357Q (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIVMTQSPSSLSA
SVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTISSLQPEDFATYYC
QNNYGIIAAGATFGGGTKVEIK/EPKSSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVS
HEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQ
PREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW
QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 38E2[B7H3]_L1.1_Light Chain (SEQ ID NO: XXX)

DIVMTQSPSSLSASVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTI
SSLQPEDFATYYCQNNYGIIAAGATFGGGTKVEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKV
QWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 28F

>XENP41031 38E2[B7H3]_H2_L1.1_Fab-38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_S239D/I332E/L368D/K370S-Fc(216)_IgG1_C220S/S364K/E357Q/S239D

Chain 1 - 38E2[B7H3]_H2_IgG1_pI(-)_Isosteric_A_S239D/I332E/L368D/K370S (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKTH
TCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-Fc(216)_IgG1_C220S/S364K/E357Q/S239D (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIVMTQSPSSLSA
SVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTISSLQPEDFATYYC
QNNYGIIAAGATFGGGTKVEIK/EPKSSDKTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVS
HEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQ
PREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW
QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 38E2[B7H3]_L1.1_Light Chain (SEQ ID NO: XXX)

DIVMTQSPSSLSASVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTI
SSLQPEDFATYYCQNNYGIIAAGATFGGGTKVEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKV
QWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

>XENP41032 38E2[B7H3]_H2_L1.1_Fab-38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_S239D/I332E/L368D/K370S-Fc(216)_IgG1_C220S/S364K/E357Q/I332E

Chain 1 - 38E2[B7H3]_H2_IgG1_pI(-)_Isosteric_A_S239D/I332E/L368D/K370S (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKTH
TCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-Fc(216)_IgG1_C220S/S364K/E357Q/I332E (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIVMTQSPSSLSA
SVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTISSLQPEDFATYYC
QNNYGIIAAGATFGGGTKVEIK/EPKSSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVS
HEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQ
PREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW
QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 38E2[B7H3]_L1.1_Light Chain (SEQ ID NO: XXX)

DIVMTQSPSSLSASVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTI
SSLQPEDFATYYCQNNYGIIAAGATFGGGTKVEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKV
QWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 28G

>XENP41033 38E2[B7H3]_H2_L1.1_Fab-38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S/S239D-Fc(216)_IgG1_C220S/S239D/I332E/S364K/E357Q

Chain 1 - 38E2[B7H3]_H2_IgG1_pI(-)_Isosteric_A_L368D/K370S/S239D (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKTH
TCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-Fc(216)_IgG1_C220S/S239D/I332E/S364K/E357Q (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIVMTQSPSSLSA
SVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTISSLQPEDFATYYC
QNNYGIIAAGATFGGGTKVEIK/EPKSSDKTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVS
HEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQ
PREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW
QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 38E2[B7H3]_L1.1_Light Chain (SEQ ID NO: XXX)

DIVMTQSPSSLSASVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTI
SSLQPEDFATYYCQNNYGIIAAGATFGGGTKVEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKV
QWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

>XENP41034 38E2[B7H3]_H2_L1.1_Fab-38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S/I332E-Fc(216)_IgG1_C220S/S239D/I332E/S364K/E357Q

Chain 1 - 38E2[B7H3]_H2_IgG1_pI(-)_Isosteric_A_L368D/K370S/I332E (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKTH
TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-Fc(216)_IgG1_C220S/S239D/I332E/S364K/E357Q (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIVMTQSPSSLSA
SVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTISSLQPEDFATYYC
QNNYGIIAAGATFGGGTKVEIK/EPKSSDKTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVS
HEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQ
PREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW
QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 38E2[B7H3]_L1.1_Light Chain (SEQ ID NO: XXX)

DIVMTQSPSSLSASVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTI
SSLQPEDFATYYCQNNYGIIAAGATFGGGTKVEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKV
QWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 28H

>XENP41035 38E2[B7H3]_H2_L1.1_Fab-38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S/S239D-Fc(216)_IgG1_C220S/S364K/E357Q/I332E

Chain 1 - 38E2[B7H3]_H2_IgG1_pI(-)_Isosteric_A_L368D/K370S/S239D (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKTH
TCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-Fc(216)_IgG1_C220S/S364K/E357Q/I332E (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIVMTQSPSSLSA
SVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTISSLQPEDFATYYC
QNNYGIIAAGATFGGGTKVEIK/EPKSSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVS
HEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQ
PREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW
QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 38E2[B7H3]_L1.1_Light Chain (SEQ ID NO: XXX)

DIVMTQSPSSLSASVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTI
SSLQPEDFATYYCQNNYGIIAAGATFGGGTKVEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKV
QWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

>XENP41036 38E2[B7H3]_H2_L1.1_Fab-38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S/I332E-Fc(216)_IgG1_C220S/S364K/E357Q/S239D

Chain 1 - 38E2[B7H3]_H2_IgG1_pI(-)_Isosteric_A_L368D/K370S/I332E (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDY
FPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKTH
TCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 38E2[B7H3]_H2_L1.1_scFv(GKPGS)4-Fc(216)_IgG1_C220S/S364K/E357Q/S239D (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAVSGFSLSSYGVIWVRQAPGKGLEYVSWVSSGGSTNYASSVKGRFTISRDTSK
NTVYLQMNSLRAEDTAVYFCARGATNSGTDIWGPGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIVMTQSPSSLSA
SVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTISSLQPEDFATYYC
QNNYGIIAAGATFGGGTKVEIK/EPKSSDKTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVS
HEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQ
PREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRW
QQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 38E2[B7H3]_L1.1_Light Chain (SEQ ID NO: XXX)

DIVMTQSPSSLSASVGDRVTITCRASQSINSWLSWYQQKPGKPPKLLIYGASNLASGVPSRFKGSGSGTDFTLTI
SSLQPEDFATYYCQNNYGIIAAGATFGGGTKVEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKV
QWKVDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Short Names	-Fc HC	+Fc scFv-Fc	Type	Tm1 (°C)	Tm1 normalized to WT	Tm2 (°C)	KD with huFcgRIIIA (nM)	KD with huFcgRIIIA normalized to V90	Yield (mg/L)	Yield normalized to WT	ADCC Reporter: Max response (%)	ADCC Reporter: EC50 (ng/ml)	Killing assay EC50 (ng/ml) 72h	Primary NK Max response at 120 hrs (%)
XENP41022	V90	V90	Symmetric	46.0	0.7	79.0	28.9	1.0	17.3	0.4	91	16.9	0.9	100
XENP41034	I332E	V90	Asymmetric	50.5	0.8	79.0	64.6	2.2	24.1	0.5	100	17.2	1.1	103
XENP41031	V90	S239D	Asymmetric	53.5	0.8	78.5	55.2	1.9	32.4	0.7	83	16.3	1.8	102
XENP41032	V90	I332E	Asymmetric	50.5	0.8	79.0	60.2	2.1	19.6	0.4	88	17.9	2.2	105
XENP41033	S239D	V90	Asymmetric	53.5	0.8	78.5	59.9	2.1	25.9	0.6	78	19.0	1.7	105
XENP41036	I332E	S239D	Asymmetric	58.0	0.9	79.0	104.0	3.6	17.0	0.4	67	11.8	1.8	102
XENP41023	S239D	S239D	Symmetric	61.5	1.0	78.5	102.0	3.5	33.3	0.8	43	26.3	2.9	95
XENP41024	I332E	I332E	Symmetric	55.0	0.9	79.0	120.0	4.2	65.1	1.5	53	23.2	3.0	99
XENP41028	V90	WT	Asymmetric	57.5	0.9	79.0	120.0	4.2	20.0	0.5	53	22.7	2.8	103
XENP41035	S239D	I332E	Asymmetric	58.0	0.9	78.5	100.0	3.5	3.2	0.1	55	15.2	2.3	98
XENP41021	WT	WT	Symmetric	64.0	1.0	78.5	417	14.4	44.2	1.0	5	59.4	8.5	82
XENP41025	WT	V90	Asymmetric	56.5	0.9	79.0	136.0	4.7	65.5	1.5	34	43.3	3.8	95
XENP41026	WT	S239D	Asymmetric	62.5	1.0	78.5	219.0	7.6	43.9	1.0	14	30.2	6.1	87
XENP41027	WT	I332E	Asymmetric	60.5	0.9	79.0	242.0	8.4	18.4	0.4	16	33.7	5.2	85
XENP41029	S239D	WT	Asymmetric	62.5	1.0	78.5	229.0	7.9	40.2	0.9	27	40.0	4.5	100
XENP41030	I332E	WT	Asymmetric	60.5	0.9	78.5	203.0	7.0	90.4	2.0	46	27.8	5.3	95

Fig. 29

Fig. 30

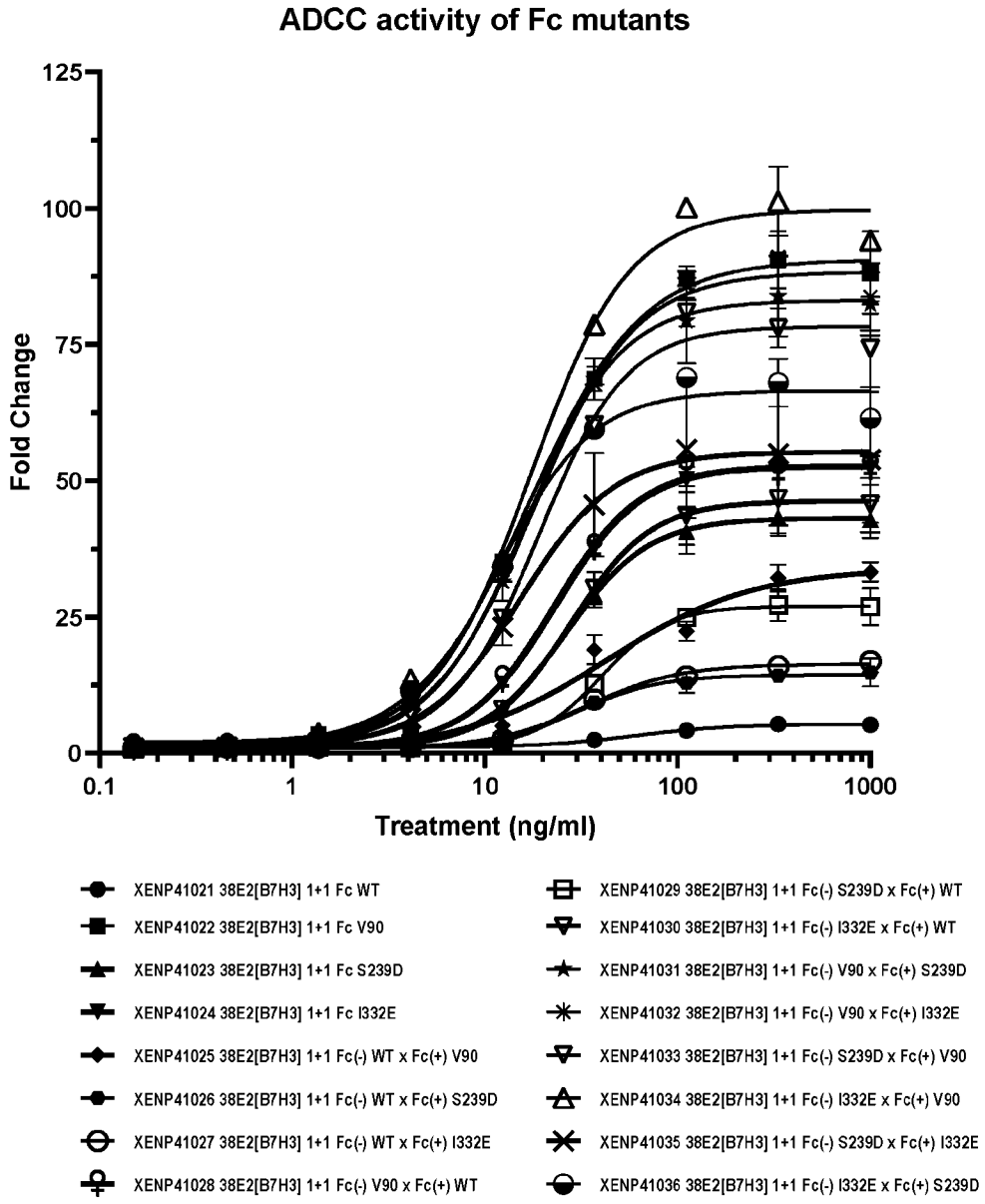

ADCC activity of Fc mutants
Fold Change
125
100
75
50
25
0
0.1
1
10
100
1000
Treatment (ng/ml)
XENP41021 38E2[B7H3] 1+1 Fc WT
XENP41022 38E2[B7H3] 1+1 Fc V90
XENP41023 38E2[B7H3] 1+1 Fc S239D
XENP41024 38E2[B7H3] 1+1 Fc I332E
XENP41025 38E2[B7H3] 1+1 Fc(-) WT x Fc(+) V90
XENP41026 38E2[B7H3] 1+1 Fc(-) WT x Fc(+) S239D
XENP41027 38E2[B7H3] 1+1 Fc(-) WT x Fc(+) I332E
XENP41028 38E2[B7H3] 1+1 Fc(-) V90 x Fc(+) WT
XENP41029 38E2[B7H3] 1+1 Fc(-) S239D x Fc(+) WT
XENP41030 38E2[B7H3] 1+1 Fc(-) I332E x Fc(+) WT
XENP41031 38E2[B7H3] 1+1 Fc(-) V90 x Fc(+) S239D
XENP41032 38E2[B7H3] 1+1 Fc(-) V90 x Fc(+) I332E
XENP41033 38E2[B7H3] 1+1 Fc(-) S239D x Fc(+) V90
XENP41034 38E2[B7H3] 1+1 Fc(-) I332E x Fc(+) V90
XENP41035 38E2[B7H3] 1+1 Fc(-) S239D x Fc(+) I332E
XENP41036 38E2[B7H3] 1+1 Fc(-) I332E x Fc(+) S239D

Fig. 31 Fig. 31A

>XENP46810 7C6[MICA/B]_H0L0_Fab-2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_PVA_/S267K/L368D/K370S-Fc(216)_IgG1_C220S/PVA_/S267K/S364K/E357Q

Chain 1 - 7C6[MICA/B]_H0_IgG1_pI(-)_Isosteric_A_PVA_/S267K/L368D/K370S (SEQ ID NO: XXX)

QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGRIAFSLETS
ASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKD
YFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKT
HTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4_Fc(216)_IgG1_C220S/PVA_/S267K/S364K/E357Q (SEQ ID NO: XXX)

QVQLVQSGAEVKKPGSSVKVSCKASGGTFSNYAIHWVRQAPGQGLEWMGGIIPIFGLANYAQKFQGRVTITADES
TSTAYMELSSLRSEDTAVYYCARRGALWGNAFDYWGQGTLVTVSS/GKPGSGKPGSGKPGSGKPGS/DIQMTQSP
SSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTDFTLTISSLQPEDF
ATYYCQQSYSTPYTFGQGTKLEIK/EPKSSDKTHTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDV
KHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKG
QPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSR
WQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 7C6[MICA/B]_L0 Light Chain (SEQ ID NO: XXX)

DIQMTQTTSSLSASLGDRVTISCSASQDISNYLNWYQQKPDGTVKLLIYDTSILHLGVPSRFSGSGSGTDYSLTI
SNLEPEDIATYYCQQYSKFPRTFGGGTTLEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWK
VDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

>XENP46811 7C6[MICA/B]_H0L0_Fab-2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S-Fc(216)_IgG1_C220S/S364K/E357Q

Chain 1 - 7C6[MICA/B]_H0_IgG1_pI(-)_Isosteric_A_L368D/K370S (SEQ ID NO: XXX)

QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGRIAFSLETS
ASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKD
YFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKT
HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNS
TYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFY
PSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4_Fc(216)_IgG1_C220S/S364K/E357Q (SEQ ID NO: XXX)

QVQLVQSGAEVKKPGSSVKVSCKASGGTFSNYAIHWVRQAPGQGLEWMGGIIPIFGLANYAQKFQGRVTITADES
TSTAYMELSSLRSEDTAVYYCARRGALWGNAFDYWGQGTLVTVSS/GKPGSGKPGSGKPGSGKPGS/DIQMTQSP
SSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTDFTLTISSLQPEDF
ATYYCQQSYSTPYTFGQGTKLEIK/EPKSSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD
VSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK
GQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 7C6[MICA/B]_L0 Light Chain (SEQ ID NO: XXX)

DIQMTQTTSSLSASLGDRVTISCSASQDISNYLNWYQQKPDGTVKLLIYDTSILHLGVPSRFSGSGSGTDYSLTI
SNLEPEDIATYYCQQYSKFPRTFGGGTTLEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWK
VDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 31B

>XENP46812 7C6[MICA/B]_H0L0_Fab-2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_S239D/I332E/L368D/K370S-Fc(216)_IgG1_C220S/S239D/I332E/S364K/E357Q

Chain 1 - 7C6[MICA/B]_H0_IgG1_pI(-)_Isosteric_A_S239D/I332E/L368D/K370S (SEQ ID NO: XXX)

QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGRIAFSLETS
ASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKD
YFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKT
HTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNS
TYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFY
PSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4_Fc(216)_IgG1_C220S/S239D/I332E/S364K/E357Q (SEQ ID NO: XXX)

QVQLVQSGAEVKKPGSSVKVSCKASGGTFSNYAIHWVRQAPGQGLEWMGGIIPIFGLANYAQKFQGRVTITADES
TSTAYMELSSLRSEDTAVYYCARRGALWGNAFDYWGQGTLVTVSS/GKPGSGKPGSGKPGSGKPGS/DIQMTQSP
SSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTDFTLTISSLQPEDF
ATYYCQQSYSTPYTFGQGTKLEIK/EPKSSDKTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVD
VSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAK
GQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 7C6[MICA/B]_L0 Light Chain (SEQ ID NO: XXX)

DIQMTQTTSSLSASLGDRVTISCSASQDISNYLNWYQQKPDGTVKLLIYDTSILHLGVPSRFSGSGSGTDYSLTI
SNLEPEDIATYYCQQYSKFPRTFGGGTTLEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWK
VDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 32

>XENP47274 empty-2C10A3.372[NKp46]_H1L1_Fab_(G4S)2_7C6[MICAB]_H0L0_scFv(GKPGS)4_(G4S)2-Fc(216)_IgG1_pI(-)_Isosteric_A_C220S/PVA_/S267K/L368D/K370S-Fc(222)_IgG1_PVA_/S267K/S364K/E357Q

Chain 1 - empty-Fc(216)_IgG1_pI(-)_Isosteric_A_C220S/PVA_/S267K/L368D/K370S (SEQ ID NO: XXX)

EPKSSDKTHTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKP
REEEYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLT
CDVSGFYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSL
SLSPGK

Chain 2 - 2C10A3.372[NKp46]_H1_(G4S)2_7C6[MICAB]_H0L0_scFv(GKPGS)4_(G4S)2_Fc(222)_IgG1_PVA_/S267K/S364K/E357Q (SEQ ID NO: XXX)

QVQLVQSGAEVKKPGSSVKVSCKASGGTFSNYAIHWVRQAPGQGLEWMGGIIPIFGLANYAQKFQGRVTITADES
TSTAYMELSSLRSEDTAVYYCARRGALWGNAFDYWGQGTLVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCG
GGGSGGGGS/QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFK
GRIAFSLETSASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSS/GKPGSGKPGSGKPGSGKPGS/
DIQMTQTTSSLSASLGDRVTISCSASQDISNYLNWYQQKPDGTVKLLIYDTSILHLGVPSRFSGSGSGTDYSLTI
SNLEPEDIATYYCQQYSKFPRTFGGGTTLEIK/GGGGSGGGGSKTHTCPPCPAPPVAGPSVFLFPPKPKDTLMIS
RTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALP
APIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSF
FLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 2C10A3.372[NKp46]_L1 Light Chain (SEQ ID NO: XXX)

DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTDFTLTI
SSLQPEDFATYYCQQSYSTPYTFGQGTKLEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWK
VDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

>XENP47281 empty-2C10A3.372[NKp46]_H1L1_Fab_(G4S)2_7C6[MICAB]_H0L0_scFv(GKPGS)4_(G4S)2-Fc(216)_IgG1_pI(-)_Isosteric_A_C220S/L368D/K370S-Fc(222)_IgG1_S364K/E357Q

Chain 1 - empty-Fc(216)_IgG1_pI(-)_Isosteric_A_C220S/L368D/K370S (SEQ ID NO: XXX)

EPKSSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTK
PREEEYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL
TCDVSGFYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKS
LSLSPGK

Chain 2 - 2C10A3.372[NKp46]_H1_(G4S)2_7C6[MICAB]_H0L0_scFv(GKPGS)4_(G4S)2_Fc(222)_IgG1_S364K/E357Q (SEQ ID NO: XXX)

QVQLVQSGAEVKKPGSSVKVSCKASGGTFSNYAIHWVRQAPGQGLEWMGGIIPIFGLANYAQKFQGRVTITADES
TSTAYMELSSLRSEDTAVYYCARRGALWGNAFDYWGQGTLVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCG
GGGSGGGGS/QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFK
GRIAFSLETSASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSS/GKPGSGKPGSGKPGSGKPGS/
DIQMTQTTSSLSASLGDRVTISCSASQDISNYLNWYQQKPDGTVKLLIYDTSILHLGVPSRFSGSGSGTDYSLTI
SNLEPEDIATYYCQQYSKFPRTFGGGTTLEIK/GGGGSGGGGSKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMI
SRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKAL
PAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGS
FFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 2C10A3.372[NKp46]_L1 Light Chain (SEQ ID NO: XXX)

DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTDFTLTI
SSLQPEDFATYYCQQSYSTPYTFGQGTKLEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWK
VDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 33

>XENP47438 7C6[MICAB]_H0L0_Fab-7C6[MICAB]_H0L0_Fab_(G4S)2_2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4_(G4S)2-IgG1_pI(-)_Isosteric_A_PVA_/S267K/L368D/K370S-Fc(222)_IgG1_/PVA_/S267K/S364K/E357Q

Chain 1 - 7C6[MICAB]_H0_IgG1_pI(-)_Isosteric_A_PVA_/S267K/L368D/K370S (SEQ ID NO: XXX)

QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGRIAFSLETS
ASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKD
YFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKT
HTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 7C6[MICAB]_H0_(G4S)2_2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4_(G4S)2_Fc(222)_IgG1_/PVA_/S267K/S364K/E357Q (SEQ ID NO: XXX)

QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGRIAFSLETS
ASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKD
YFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCGGG
GSGGGGS/QVQLVQSGAEVKKPGSSVKVSCKASGGTFSNYAIHWVRQAPGQGLEWMGGIIPIFGLANYAQKFQGR
VTITADESTSTAYMELSSLRSEDTAVYYCARRGALWGNAFDYWGQGTLVTVSS/GKPGSGKPGSGKPGSGKPGS/
DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTDFTLTI
SSLQPEDFATYYCQQSYSTPYTFGQGTKLEIK/GGGGSGGGGSKTHTCPPCPAPPVAGPSVFLFPPKPKDTLMIS
RTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALP
APIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSF
FLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 7C6[MICA/B]_L0 Light Chain (SEQ ID NO: XXX)

DIQMTQTTSSLSASLGDRVTISCSASQDISNYLNWYQQKPDGTVKLLIYDTSILHLGVPSRFSGSGSGTDYSLTI
SNLEPEDIATYYCQQYSKFPRTFGGGTTLEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWK
VDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

>XENP47439 7C6[MICAB]_H0L0_Fab-7C6[MICAB]_H0L0_Fab_(G4S)2_2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4_(G4S)2-IgG1_pI(-)_Isosteric_A_L368D/K370S-Fc(222)_IgG1_S364K/E357Q

Chain 1 - 7C6[MICAB]_H0_IgG1_pI(-)_Isosteric_A_L368D/K370S (SEQ ID NO: XXX)

QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGRIAFSLETS
ASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKD
YFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKT
HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNS
TYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFY
PSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 7C6[MICAB]_H0_(G4S)2_2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4_(G4S)2_Fc(222)_IgG1_S364K/E357Q (SEQ ID NO: XXX)

QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGRIAFSLETS
ASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKD
YFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCGGG
GSGGGGS/QVQLVQSGAEVKKPGSSVKVSCKASGGTFSNYAIHWVRQAPGQGLEWMGGIIPIFGLANYAQKFQGR
VTITADESTSTAYMELSSLRSEDTAVYYCARRGALWGNAFDYWGQGTLVTVSS/GKPGSGKPGSGKPGSGKPGS/
DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTDFTLTI
SSLQPEDFATYYCQQSYSTPYTFGQGTKLEIK/GGGGSGGGGSKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMI
SRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKAL
PAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGS
FFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 7C6[MICA/B]_L0 Light Chain (SEQ ID NO: XXX)

DIQMTQTTSSLSASLGDRVTISCSASQDISNYLNWYQQKPDGTVKLLIYDTSILHLGVPSRFSGSGSGTDYSLTI
SNLEPEDIATYYCQQYSKFPRTFGGGTTLEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWK
VDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 34

>XENP47442 7C6[MICA/B]_H0L0_Fab_(G4S)2_7C6[MICA/B]_H0L0_Fab-2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_PVA_/S267K/L368D/K370S-Fc(216)_IgG1_C220S/PVA_/S267K/S364K/E357Q

Chain 1 - 7C6[MICA/B]_H0_(G4S)2_7C6[MICA/B]_H0_IgG1_pI(-)_Isosteric_A_PVA_/S267K/L368D/K370S (SEQ ID NO: XXX)

QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGRIAFSLETS
ASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKD
YFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCGGG
GSGGGGS/QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGR
IAFSLETSASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSS/ASTKGPSVFPLAPSSKSTSGGTA
ALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKV
EPKSCDKTHTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKP
REEEYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLT
CDVSGFYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSL
SLSPGK

Chain 2 - 2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4_Fc(216)_IgG1_C220S/PVA_/S267K/S364K/E357Q (SEQ ID NO: XXX)

QVQLVQSGAEVKKPGSSVKVSCKASGGTFSNYAIHWVRQAPGQGLEWMGGIIPIFGLANYAQKFQGRVTITADES
TSTAYMELSSLRSEDTAVYYCARRGALWGNAFDYWGQGTLVTVSS/GKPGSGKPGSGKPGSGKPGS/DIQMTQSP
SSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTDFTLTISSLQPEDF
ATYYCQQSYSTPYTFGQGTKLEIK/EPKSSDKTHTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDV
KHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKG
QPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSR
WQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 7C6[MICA/B]_L0 Light Chain (SEQ ID NO: XXX)

DIQMTQTTSSLSASLGDRVTISCSASQDISNYLNWYQQKPDGTVKLLIYDTSILHLGVPSRFSGSGSGTDYSLTI
SNLEPEDIATYYCQQYSKFPRTFGGGTTLEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWK
VDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

>XENP47443 7C6[MICA/B]_H0L0_Fab_(G4S)2_7C6[MICA/B]_H0L0_Fab-2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S-Fc(216)_IgG1_C220S/S364K/E357Q

Chain 1 - 7C6[MICA/B]_H0_(G4S)2_7C6[MICA/B]_H0_IgG1_pI(-)_Isosteric_A_L368D/K370S (SEQ ID NO: XXX)

QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGRIAFSLETS
ASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKD
YFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCGGG
GSGGGGS/QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGR
IAFSLETSASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSS/ASTKGPSVFPLAPSSKSTSGGTA
ALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKV
EPKSCDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTK
PREEEYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSL
TCDVSGFYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKS
LSLSPGK

Chain 2 - 2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4_Fc(216)_IgG1_C220S/S364K/E357Q (SEQ ID NO: XXX)

QVQLVQSGAEVKKPGSSVKVSCKASGGTFSNYAIHWVRQAPGQGLEWMGGIIPIFGLANYAQKFQGRVTITADES
TSTAYMELSSLRSEDTAVYYCARRGALWGNAFDYWGQGTLVTVSS/GKPGSGKPGSGKPGSGKPGS/DIQMTQSP
SSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTDFTLTISSLQPEDF
ATYYCQQSYSTPYTFGQGTKLEIK/EPKSSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD
VSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK
GQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKS
RWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 - 7C6[MICA/B]_L0 Light Chain (SEQ ID NO: XXX)

DIQMTQTTSSLSASLGDRVTISCSASQDISNYLNWYQQKPDGTVKLLIYDTSILHLGVPSRFSGSGSGTDYSLTI
SNLEPEDIATYYCQQYSKFPRTFGGGTTLEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWK
VDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 35

>XENP47446 7C6[MICAB]_H0L0_Fab-7C6[MICAB]_H0L0_Fab-IgG1_pI(-)_Isosteric_A_PVA_/S267K/L368D/K370S-IgG1_PVA_/S267K/S364K/E357Q/K447del_(G4S)3_2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4

Chain 1 - 7C6[MICAB]_H0_IgG1_pI(-)_Isosteric_A_PVA_/S267K/L368D/K370S (SEQ ID NO: XXX)

QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGRIAFSLETS
ASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKD
YFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKT
HTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYP
SDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 7C6[MICAB]_H0_IgG1_PVA_/S267K/S364K/E357Q/K447del_(G4S)3_2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4 (SEQ ID NO: XXX)

QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGRIAFSLETS
ASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKD
YFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKT
HTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQYNST
YRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYP
SDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGGGG
GSGGGGSGGGGS/QVQLVQSGAEVKKPGSSVKVSCKASGGTFSNYAIHWVRQAPGQGLEWMGGIIPIFGLANYAQ
KFQGRVTITADESTSTAYMELSSLRSEDTAVYYCARRGALWGNAFDYWGQGTLVTVSS/GKPGSGKPGSGKPGSG
KPGS/DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTD
FTLTISSLQPEDFATYYCQQSYSTPYTFGQGTKLEIK

Chain 3 - 7C6[MICA/B]_L0 Light Chain (SEQ ID NO: XXX)

DIQMTQTTSSLSASLGDRVTISCSASQDISNYLNWYQQKPDGTVKLLIYDTSILHLGVPSRFSGSGSGTDYSLTI
SNLEPEDIATYYCQQYSKFPRTFGGGTTLEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWK
VDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

>XENP47447 7C6[MICAB]_H0L0_Fab-7C6[MICAB]_H0L0_Fab-IgG1_pI(-)_Isosteric_A_L368D/K370S-IgG1_S364K/E357Q/K447del_(G4S)3_2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4

Chain 1 - 7C6[MICAB]_H0_IgG1_pI(-)_Isosteric_A_L368D/K370S (SEQ ID NO: XXX)

QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGRIAFSLETS
ASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKD
YFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCDKT
HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEYNS
TYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFY
PSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - 7C6[MICAB]_H0_IgG1_S364K/E357Q/K447del_(G4S)3_2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4 (SEQ ID NO: XXX)

QIQLVQSGPELKKPGETVKVSCKASGYMFTNYAMNWVKQAPEKGLKWMGWINTHTGDPTYADDFKGRIAFSLETS
ASTAYLQINNLKNEDTATYFCVRTYGNYAMDYWGQGTSVTVSS/ASTKGPSVFPLAPSSKSTSGGTAALGCLVKD
YFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKT
HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNS
TYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFY
PSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGGG
GGSGGGGSGGGGS/QVQLVQSGAEVKKPGSSVKVSCKASGGTFSNYAIHWVRQAPGQGLEWMGGIIPIFGLANYA
QKFQGRVTITADESTSTAYMELSSLRSEDTAVYYCARRGALWGNAFDYWGQGTLVTVSS/GKPGSGKPGSGKPGS
GKPGS/DIQMTQSPSSLSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGT
DFTLTISSLQPEDFATYYCQQSYSTPYTFGQGTKLEIK

Chain 3 - 7C6[MICA/B]_L0 Light Chain (SEQ ID NO: XXX)

DIQMTQTTSSLSASLGDRVTISCSASQDISNYLNWYQQKPDGTVKLLIYDTSILHLGVPSRFSGSGSGTDYSLTI
SNLEPEDIATYYCQQYSKFPRTFGGGTTLEIK/RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWK
VDNALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 36

Clone	Bin
7C6	Bin 1d
3F9	Bin1a
6E1	Bin 2a
13A9	Bin 1d
1D5	Bin 1d
1B11-2	Bin 2a
1C7	Bin 2a
1D7	Bin 1b
1A2	Bin 2a
1B6	Bin 2a
1C8	Bin 2a
1F6	Bin 2a
1F7	Bin 2a
1D3	Bin 2a
1D8	Bin 2a
1D9	Bin 2a
1E1	Bin 2a
1E11-1	Bin 1d
3B12	No Bin
2D4	Bin 2a
2E5	Bin 1d
2G8	Bin 2a
1H7	No Bin
2C11	Bin 2a
2E8	No Bin
2F7	Bin 1c
2E12	Bin 1d
2A8	No Bin

Fig. 37

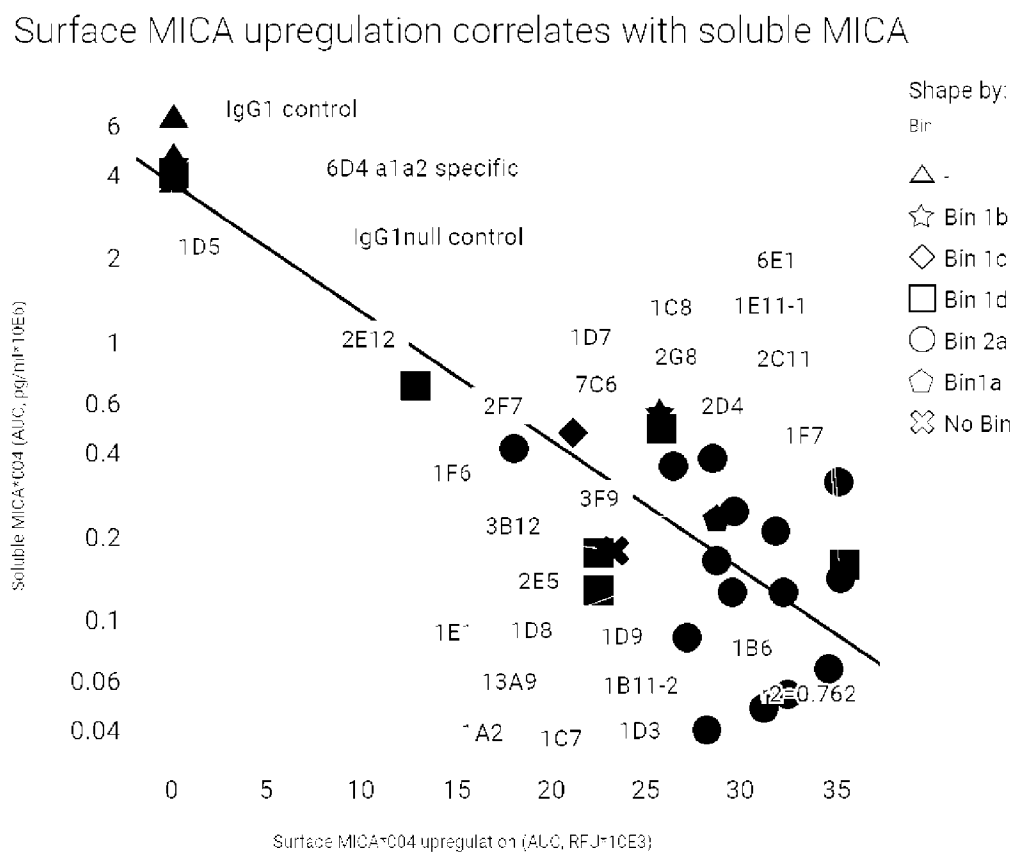

Surface MICA upregulation correlates with soluble MICA
IgG1 control
6D4 a1a2 specific
IgG1null control
Shape by:
Bin
Bin 1b
Bin 1c
Bin 1d
Bin 2a
Bin1a
No Bin
1D5
2E12
2F7
1F6
3B12
2E5
1D7
7C6
1C8
1E11-1
6E1
2G8
2C11
2D4
1F7
3F9
1D8
1D9
1B6
13A9
1B11-2
1C7
1D3
0
5
10
15
20
25
30
35
0.04
0.06
0.1
0.2
0.4
0.6
1
2
4
6

Fig. 38

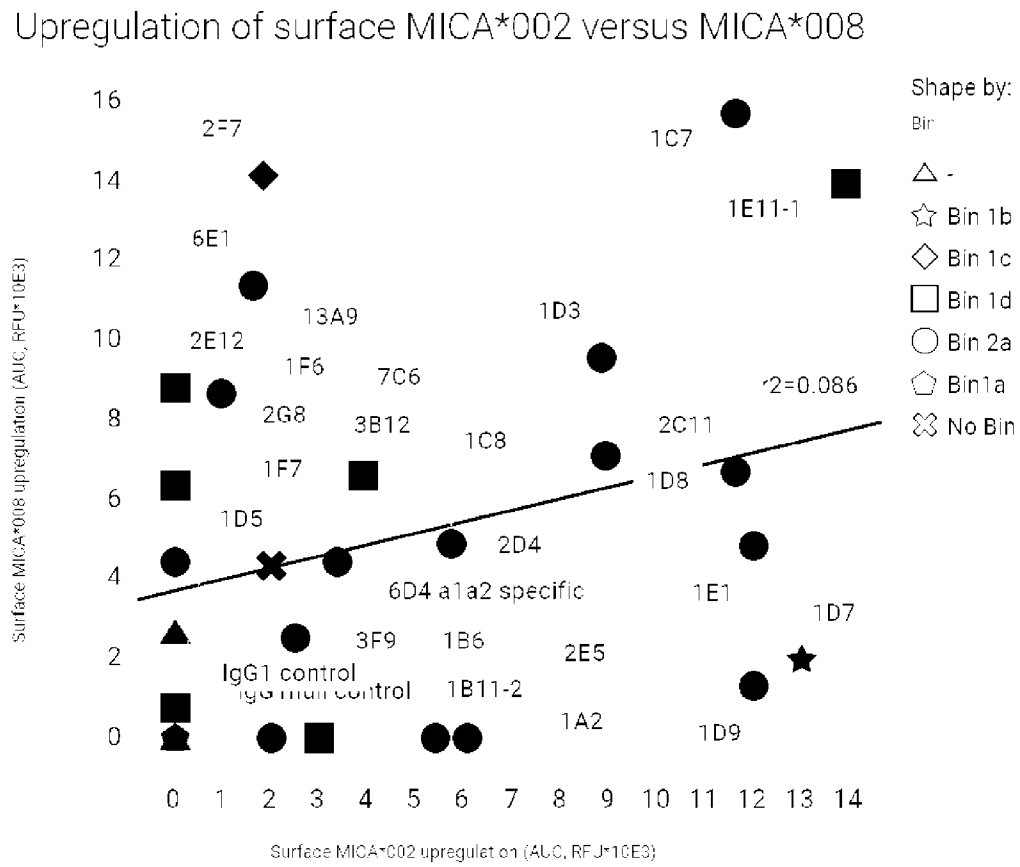

Upregulation of surface MICA*002 versus MICA*008
Surface MICA*008 upregulation (AUC, RFU*10E3)
Surface MICA*002 upregulation (AUC, RFU*10E3)
Shape by:
Bin
-
Bin 1b
Bin 1c
Bin 1d
Bin 2a
Bin1a
No Bin
2F7
6E1
2E12
13A9
1F6
7C6
2G8
3B12
1F7
1C8
1D5
2D4
6D4 a1a2 specific
3F9
1B6
IgG1 control
1B11-2
2E5
1A2
1D3
1C7
1E11-1
2C11
1D8
1E1
1D7
1D9
r2=0.086

Fig. 39

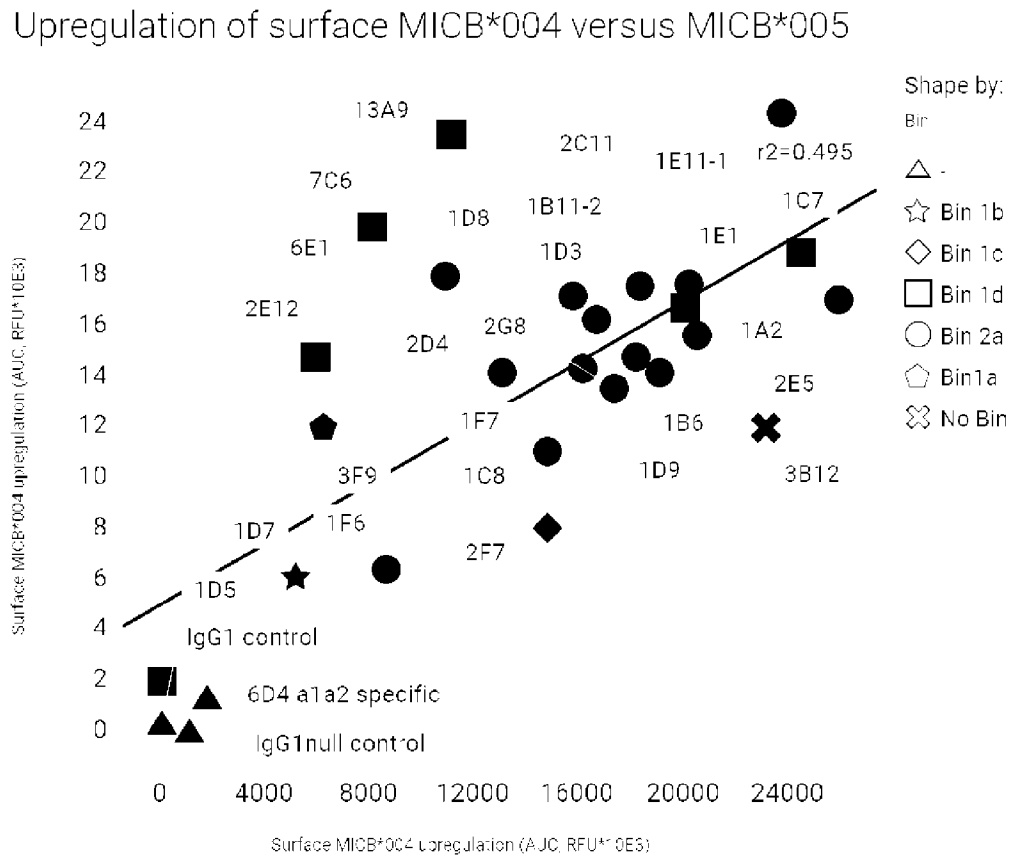

Upregulation of surface MICB*004 versus MICB*005
Surface MICB*004 upregulation (AUC, RFU*10E3)
Surface MICB*004 upregulation (AUC, RFU*10E3)
Shape by:
Bin
-
Bin 1b
Bin 1c
Bin 1d
Bin 2a
Bin1a
No Bin
r2=0.495
13A9
2C11
1E11-1
7C6
1B11-2
1C7
1D8
6E1
1D3
1E1
2E12
2G8
2D4
1A2
2E5
1F7
1B6
3F9
1C8
1D9
3B12
1D7
1F6
2F7
1D5
IgG1 control
6D4 a1a2 specific
IgG1null control
0
2
4
6
8
10
12
14
16
18
20
22
24
0
4000
8000
12000
16000
20000
24000

Fig. 40

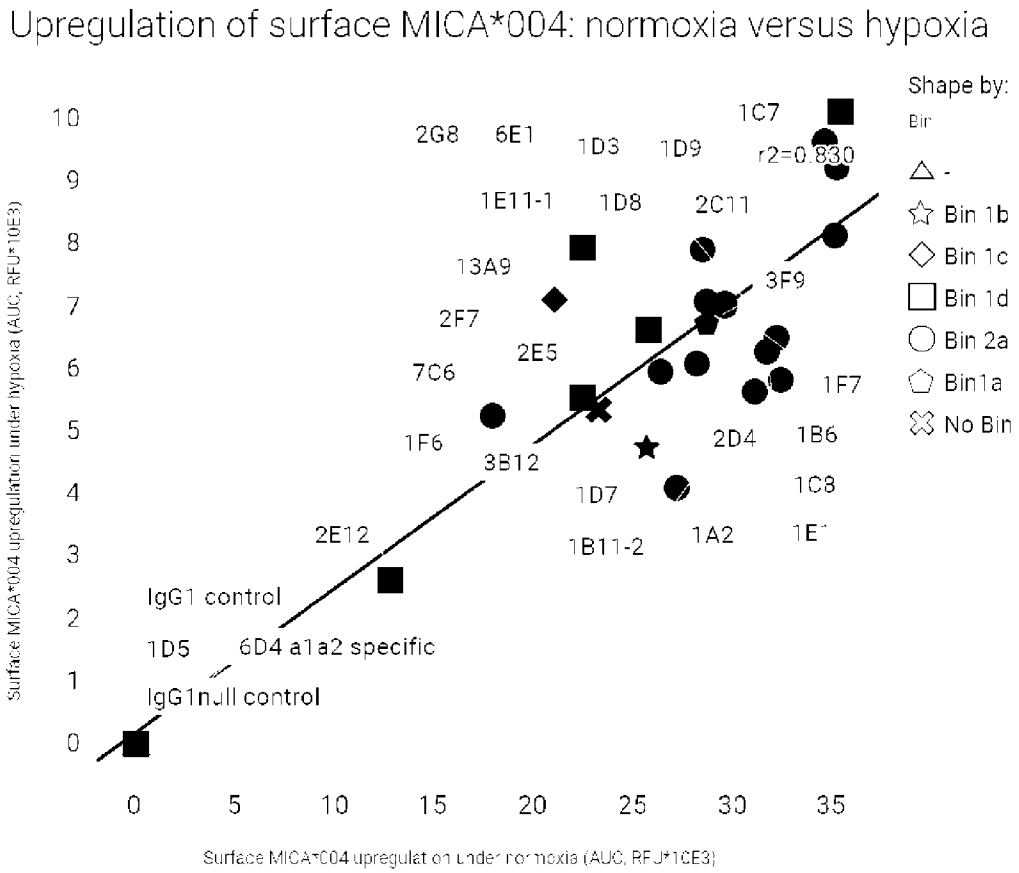

Upregulation of surface MICA*004: normoxia versus hypoxia
Surface MICA*004 upregulation under hypoxia (AUC, RFU*10E3)
Surface MICA*004 upregulation under normoxia (AUC, RFU*10E3)
r2=0.830
1C7
2G8
6E1
1D3
1D9
1E11-1
1D8
2C11
13A9
3F9
2F7
2E5
7C6
1F7
1F6
2D4
1B6
3B12
1D7
1C8
2E12
1B11-2
1A2
IgG1 control
1D5
6D4 a1a2 specific
IgG1null control
Shape by:
Bin
-
Bin 1b
Bin 1c
Bin 1d
Bin 2a
Bin1a
No Bin

Fig. 41

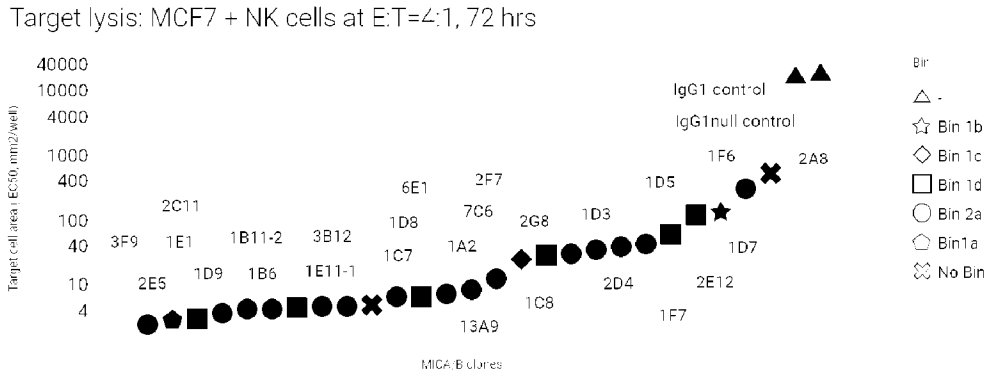

Target lysis: MCF7 + NK cells at E:T=4:1, 72 hrs
Target cell area (EC50, mm2/well)
40000
10000
4000
1000
400
100
40
10
4
IgG1 control
IgG1null control
3F9
2C11
1E1
1B11-2
3B12
2E5
1D9
1B6
1E11-1
6E1
1D8
1C7
2F7
7C6
1A2
13A9
2G8
1C8
1D3
2D4
1D5
1F6
1F7
2A8
1D7
2E12
MICA/B clones
Bin
Bin 1b
Bin 1c
Bin 1d
Bin 2a
Bin1a
No Bin

Fig. 42

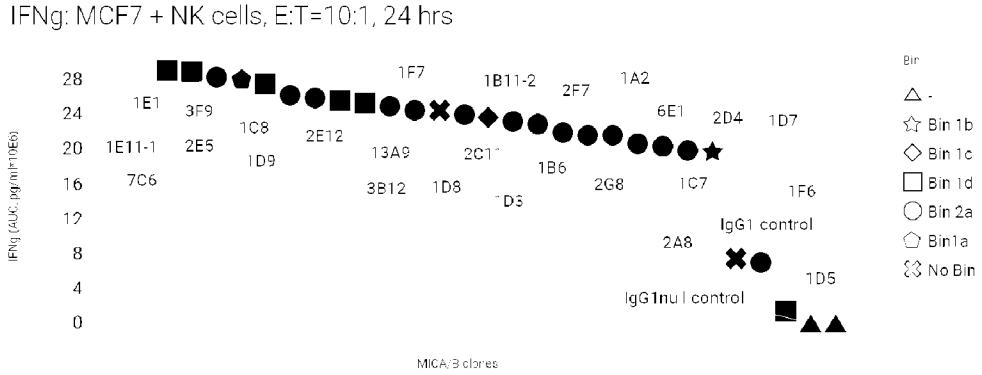

IFNg: MCF7 + NK cells, E:T=10:1, 24 hrs
IFNg (AUC, pg/ml*10E6)
28
24
20
16
12
8
4
0
1E1
3F9
1F7
1B11-2
2F7
1A2
6E1
2D4
1D7
1E11-1
2E5
1C8
2E12
1D9
13A9
2C1
1B6
7C6
3B12
1D8
D3
2G8
1C7
1F6
IgG1 control
2A8
1D5
IgG1nu l control
MICA/B clones
Bin
-
Bin 1b
Bin 1c
Bin 1d
Bin 2a
Bin1a
No Bin

Fig. 43

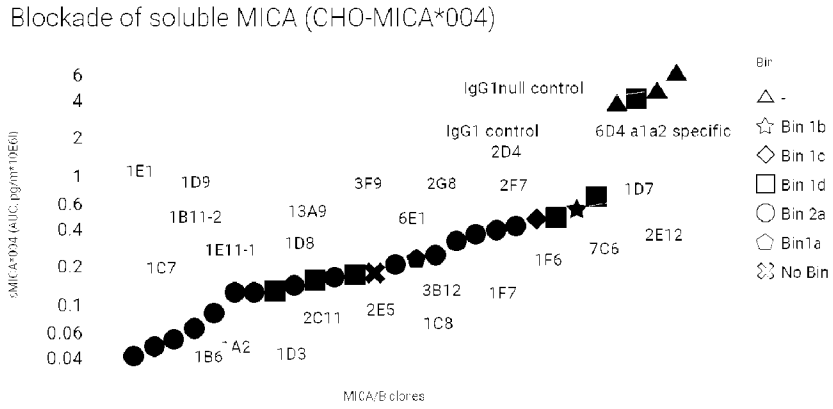

Blockade of soluble MICA (CHO-MICA*004)
6
4
2
1
0.6
0.4
0.2
0.1
0.06
0.04
IgG1null control
IgG1 control
2D4
6D4 a1a2 specific
1E1
1D9
3F9
2G8
2F7
1D7
1B11-2
13A9
6E1
2E12
1E11-1
1D8
7C6
1C7
1F6
3B12
1F7
2C11
2E5
1C8
1B6
A2
1D3
MICA/B clones
Bin
-
Bin 1b
Bin 1c
Bin 1d
Bin 2a
Bin1a
No Bin

Fig. 44

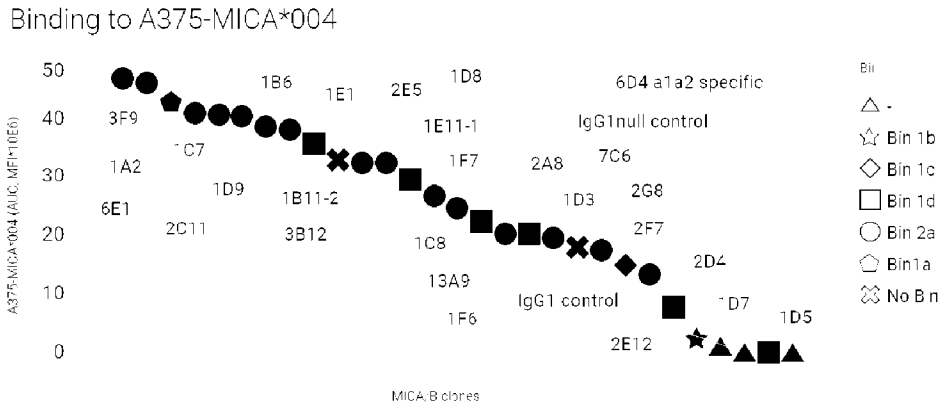

Binding to A375-MICA*004
A375-MICA*004 (AUC, MFI*10E6)
50
40
30
20
10
0
3F9
1A2
6E1
1C7
1D9
2C11
1B6
1E1
2E5
1D8
1B11-2
3B12
1E11-1
1F7
1C8
13A9
1F6
6D4 a1a2 specific
IgG1null control
2A8
7C6
1D3
2G8
2F7
2D4
IgG1 control
1D7
1D5
2E12
MICA/B clones
Bi
Bin 1b
Bin 1c
Bin 1d
Bin 2a
Bin1a
No B n

Fig. 45

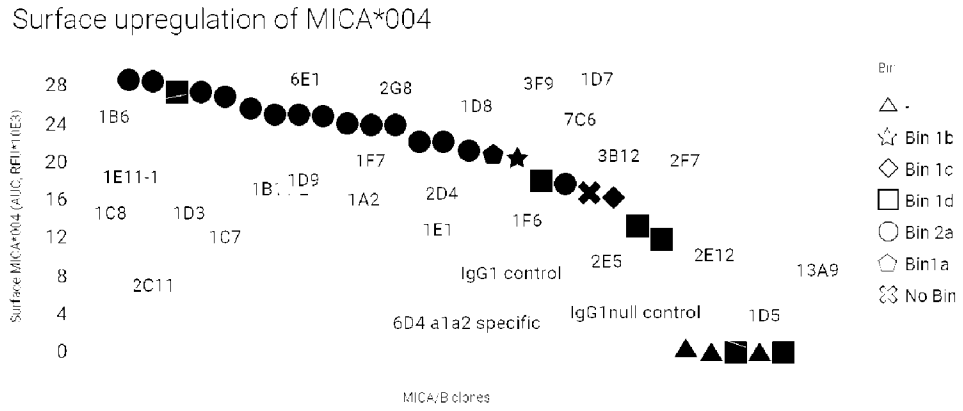

Surface upregulation of MICA*004
Surface MICA*004 (AUC, RFI*10E3)
28
24
20
16
12
8
4
0
1B6
6E1
2G8
3F9
1D7
1D8
7C6
1E11-1
1F7
3B12
2F7
1C8
1D3
1B1, 1D9
1A2
2D4
1C7
1E1
1F6
2E5
2E12
13A9
2C11
IgG1 control
6D4 a1a2 specific
IgG1null control
1D5
MICA/B clones
Bin
-
Bin 1b
Bin 1c
Bin 1d
Bin 2a
Bin1a
No Bin

Fig. 46

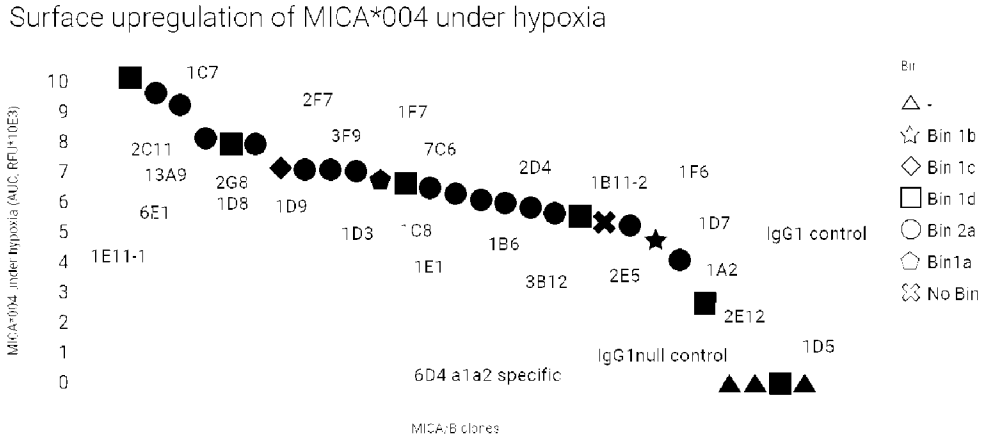

Surface upregulation of MICA*004 under hypoxia
MICA*004 under hypoxia (AUC RFI*10E3)
10
9
8
7
6
5
4
3
2
1
0
1C7
2F7
1F7
3F9
2C11
7C6
13A9
2D4
1B11-2
1F6
2G8
1D8
1D9
6E1
1D3
1C8
1D7
IgG1 control
1B6
1E11-1
1E1
1A2
3B12
2E5
2E12
IgG1null control
1D5
6D4 a1a2 specific
MICA/B clones
Bin
-
Bin 1b
Bin 1c
Bin 1d
Bin 2a
Bin1a
No Bin

Fig. 47

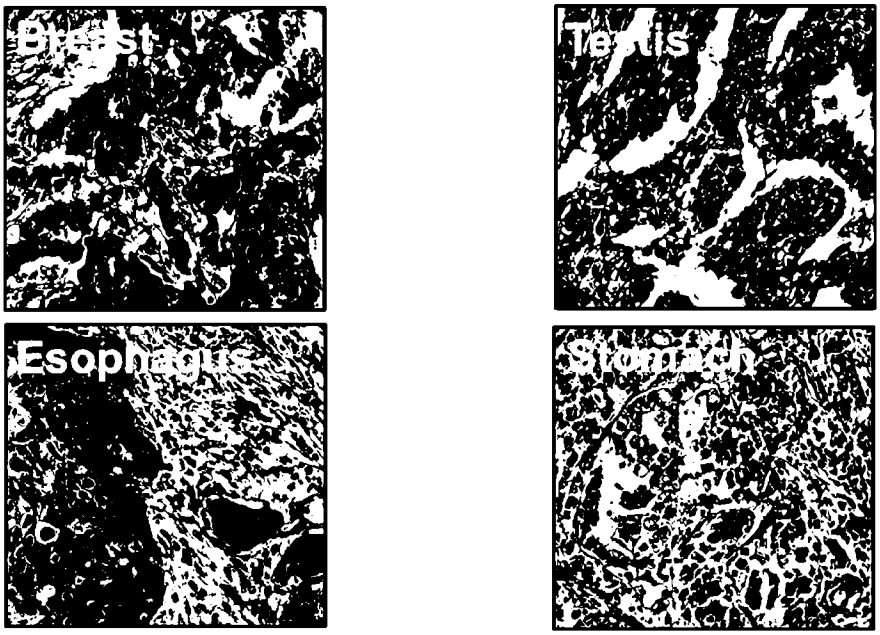
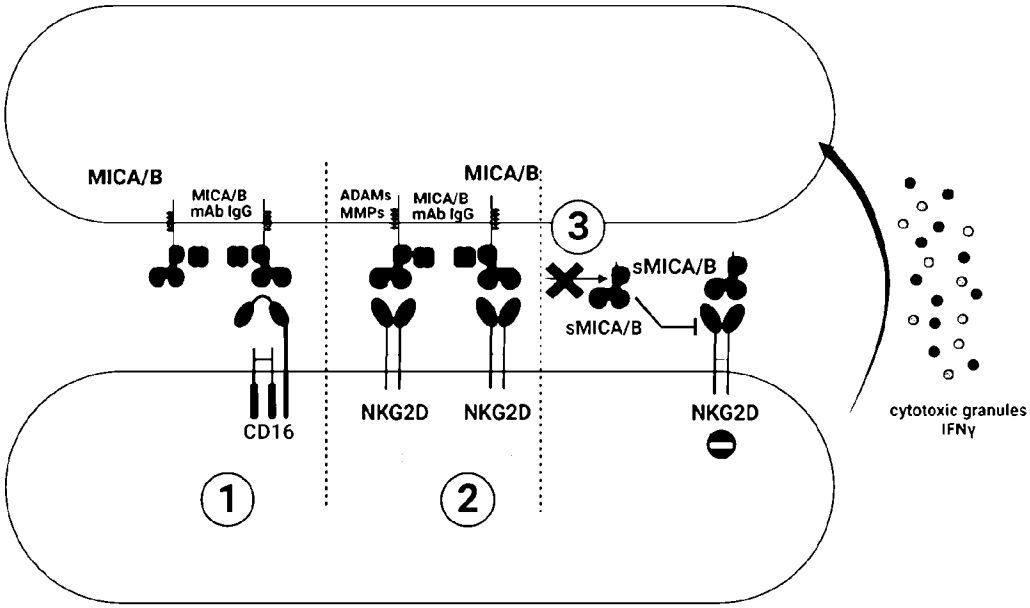


Fig. 48



① ADCC
② NKG2D agonism
③ Blockade of MICA and MICB cleavage

Fig. 49

Fig. 49A

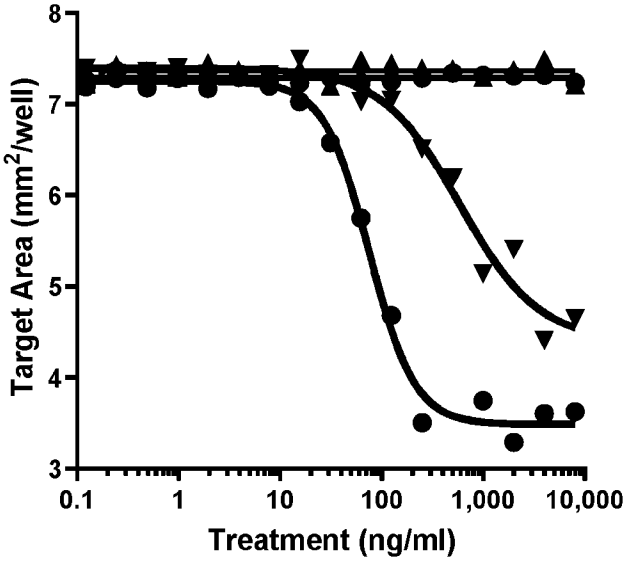


Fig. 49B

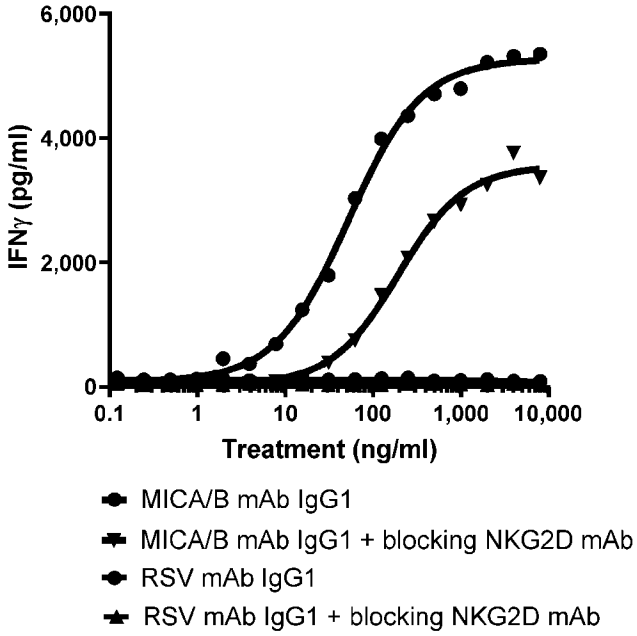


Fig. 50

Fig. 50A

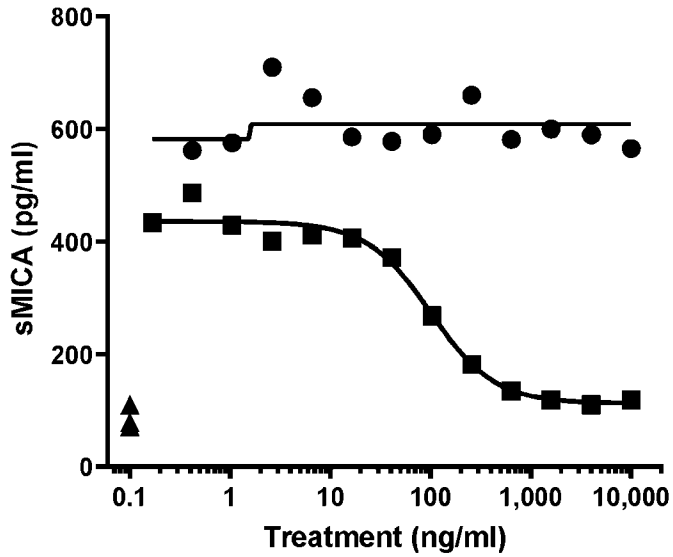


Fig. 50B

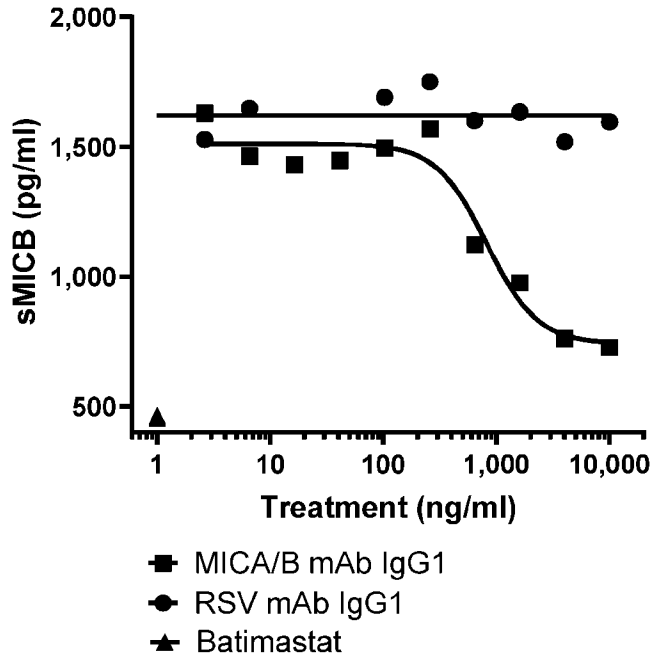


Fig. 51

Fig. 51A

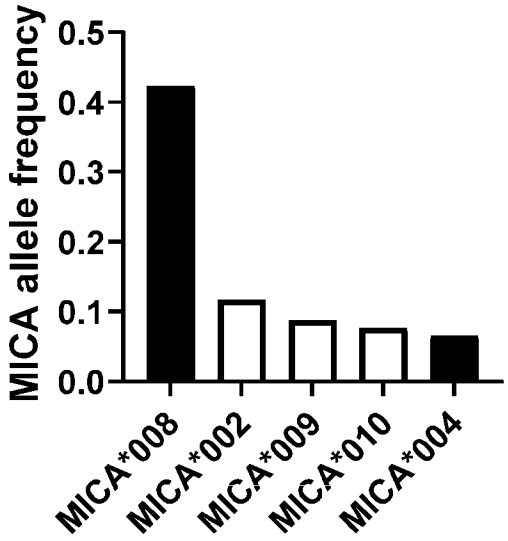


Fig. 51B

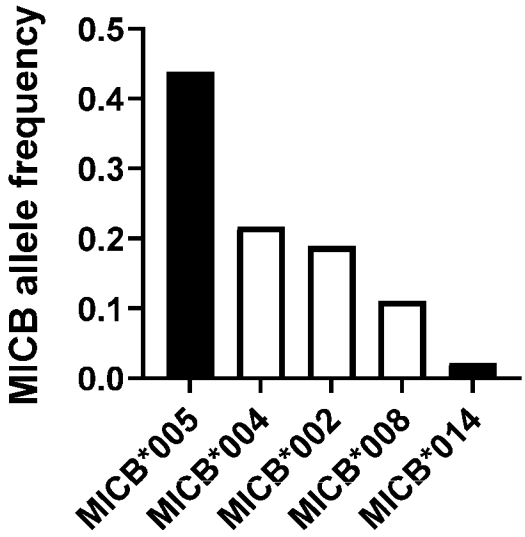


Fig. 52

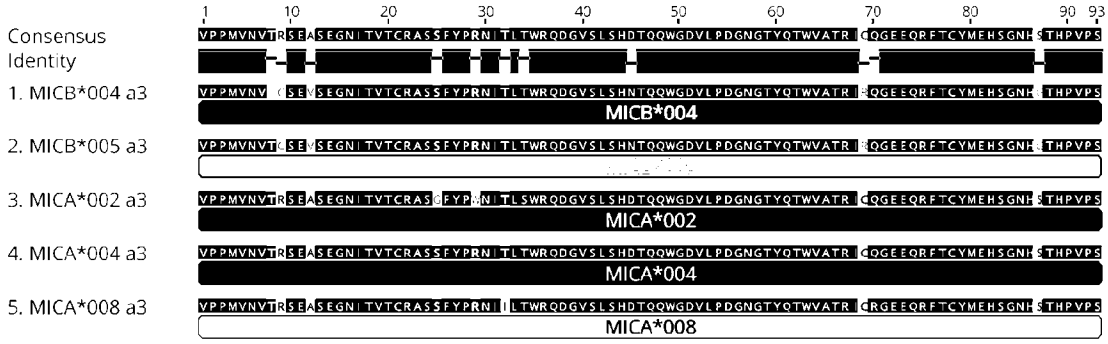

1
10
20
30
40
50
60
70
80
90
93
Consensus
Identity
1. MICB*004 a3
MICB*004
2. MICB*005 a3
3. MICA*002 a3
MICA*002
4. MICA*004 a3
MICA*004
5. MICA*008 a3
MICA*008

Fig. 53

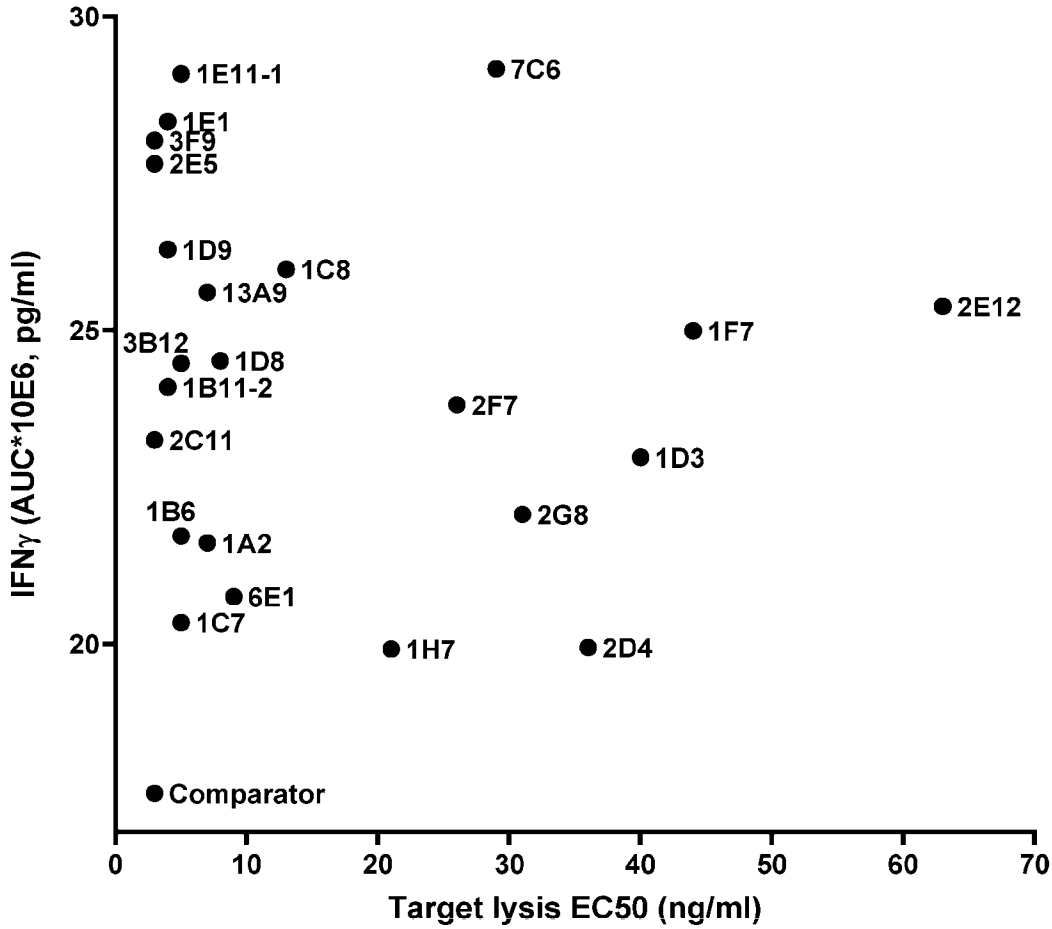

30
25
20
IFNγ (AUC*10E6, pg/ml)
1E11-1
7C6
1E1
3F9
2E5
1D9
1C8
13A9
2E12
1F7
3B12
1D8
1B11-2
2F7
2C11
1D3
1B6
2G8
1A2
6E1
1C7
1H7
2D4
Comparator
0
10
20
30
40
50
60
70
Target lysis EC50 (ng/ml)

Fig. 54

Fig. 54A

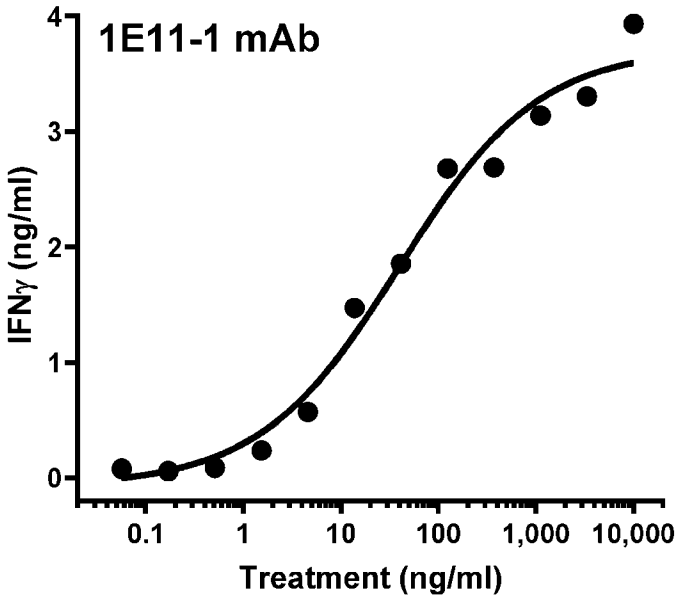


Fig. 54B

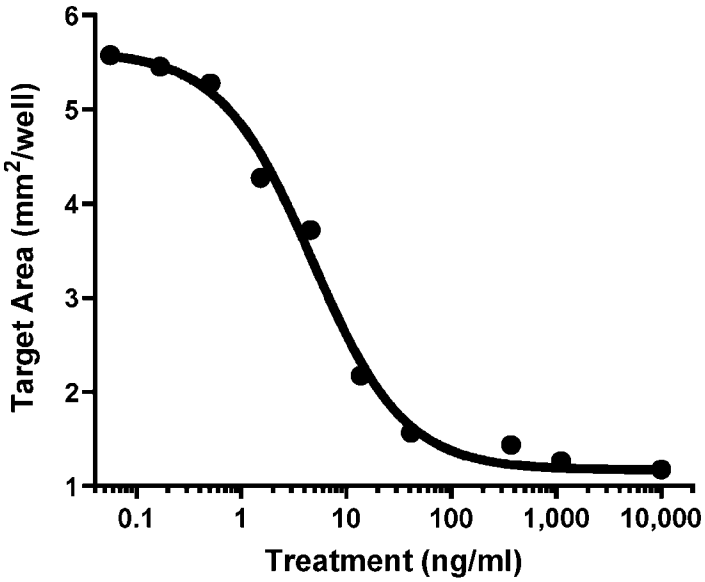


Fig. 55

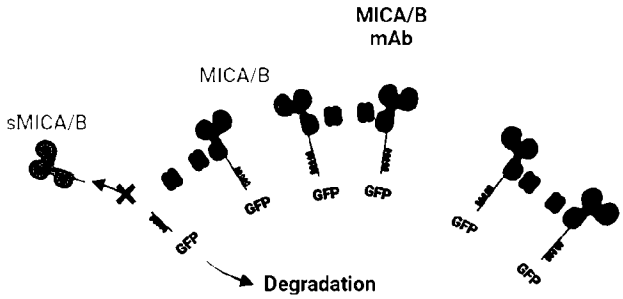


Fig. 56

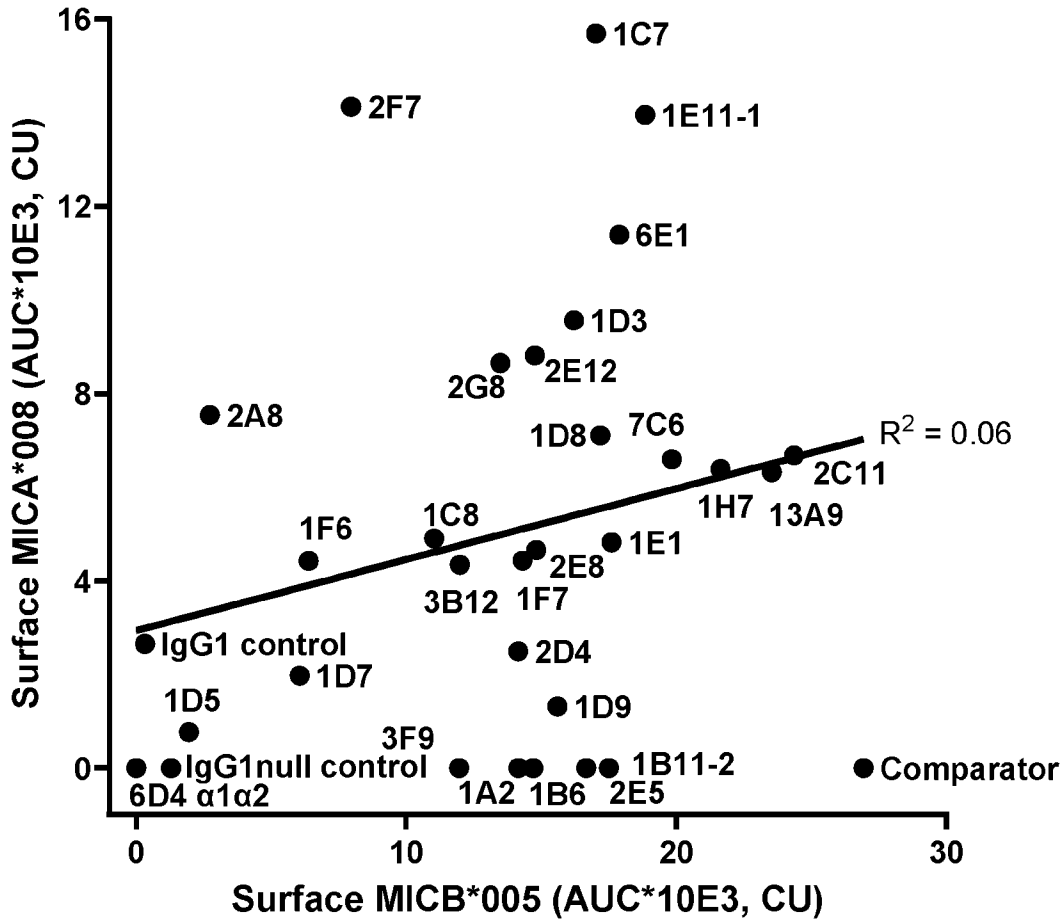

16
12
8
4
0
Surface MICA*008 (AUC*10E3, CU)
0
10
20
30
Surface MICB*005 (AUC*10E3, CU)
1C7
2F7
1E11-1
6E1
1D3
2G8
2E12
2A8
1D8
7C6
R2 = 0.06
2C11
1H7
13A9
1F6
1C8
1E1
2E8
3B12
1F7
IgG1 control
2D4
1D7
1D5
1D9
3F9
IgG1null control
1B11-2
Comparator
6D4 α1α2
1A2
1B6
2E5

Fig. 57

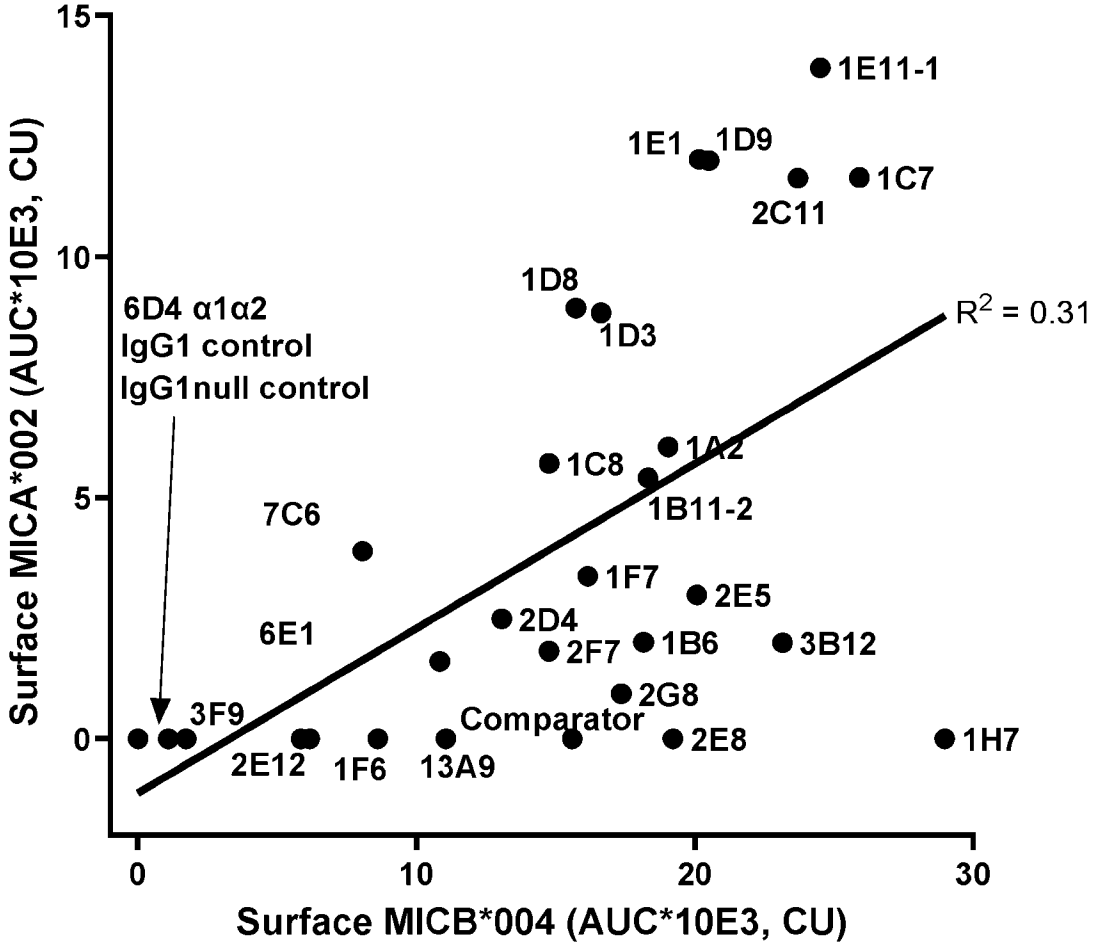
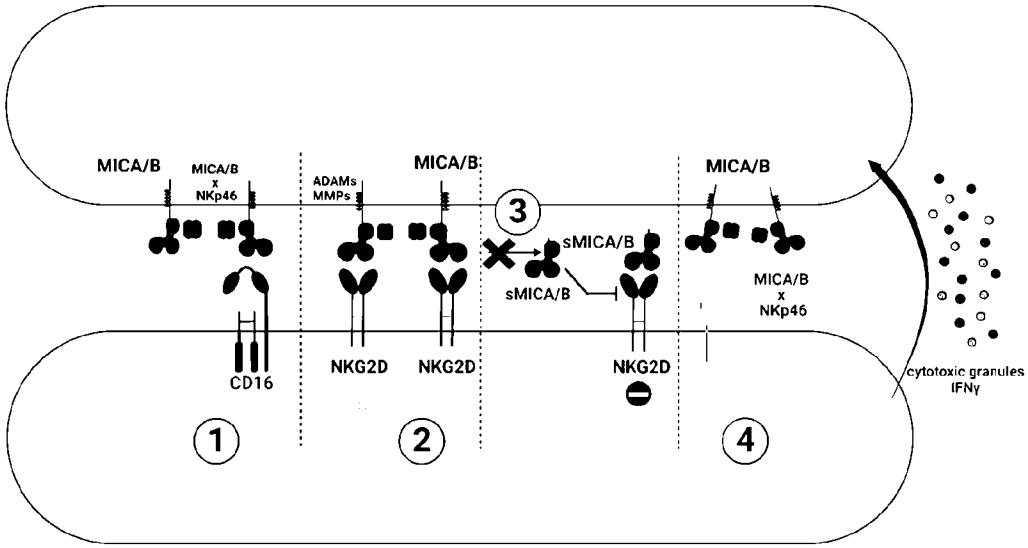

15
10
5
0
0
10
20
30
Surface MICA*002 (AUC*10E3, CU)
Surface MICB*004 (AUC*10E3, CU)
1E11-1
1E1
1D9
1C7
2C11
1D8
1D3
6D4 α1α2
IgG1 control
IgG1null control
R2 = 0.31
1C8
1A2
1B11-2
7C6
1F7
2E5
2D4
6E1
2F7
1B6
3B12
2G8
3F9
Comparator
2E8
1H7
2E12
1F6
13A9

Fig. 58



① ADCC
② NKG2D agonism
③ Blockade of MICA and MICB cleavage
④ NKp46 agonism

Fig. 59

Fig. 59A

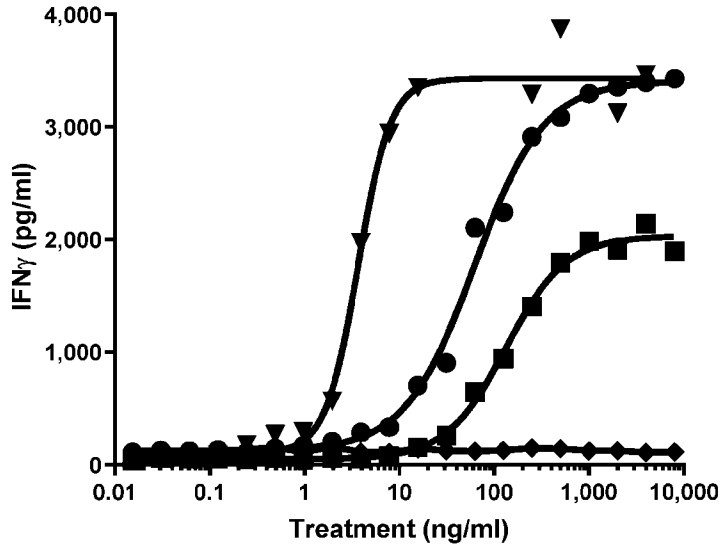


Fig. 59B

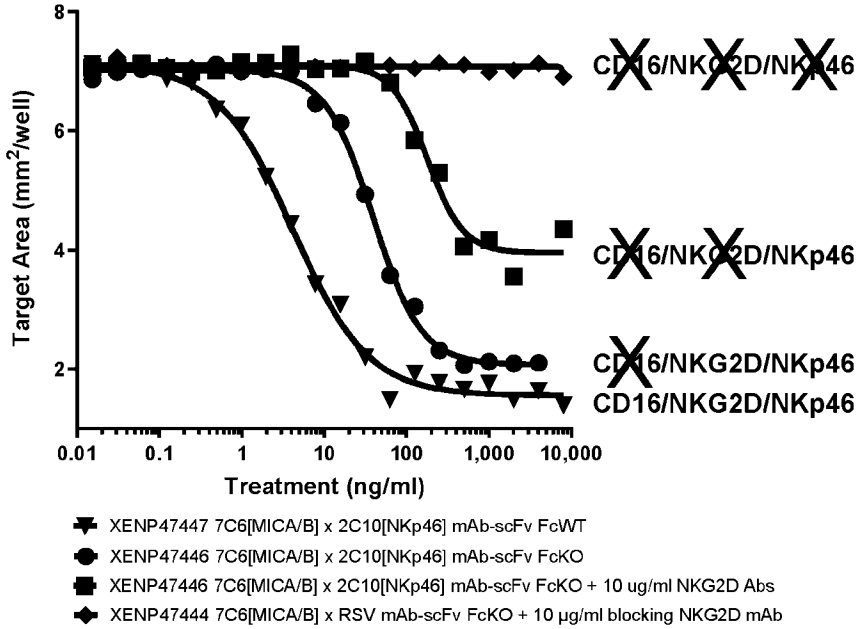


Fig. 60

Fig. 60A

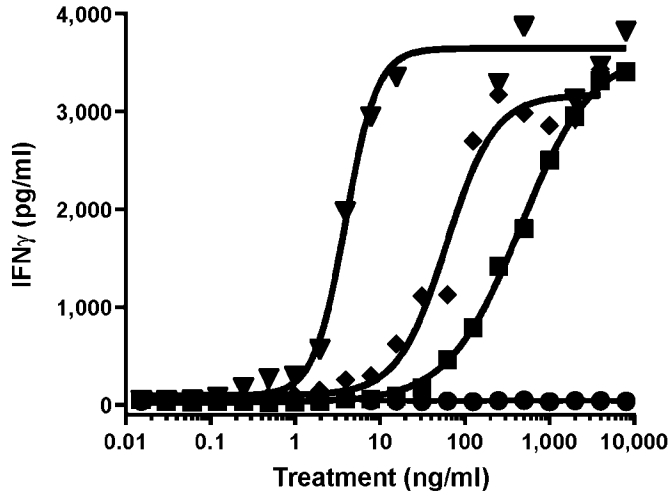


Fig. 60B

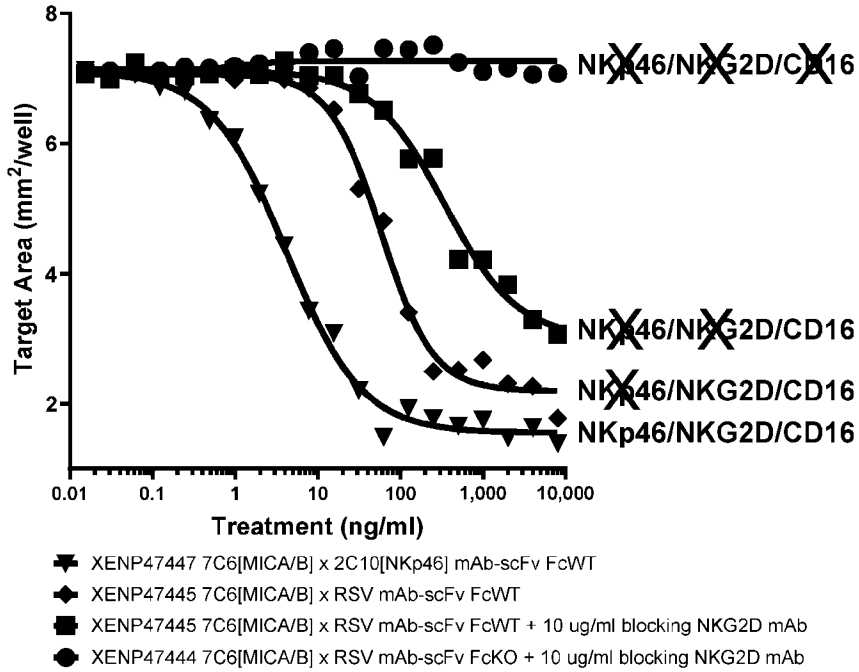


Fig. 61

Fig. 61A

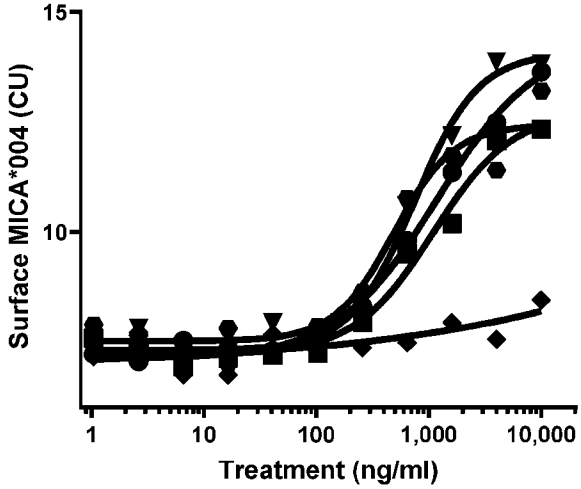


Fig. 61B

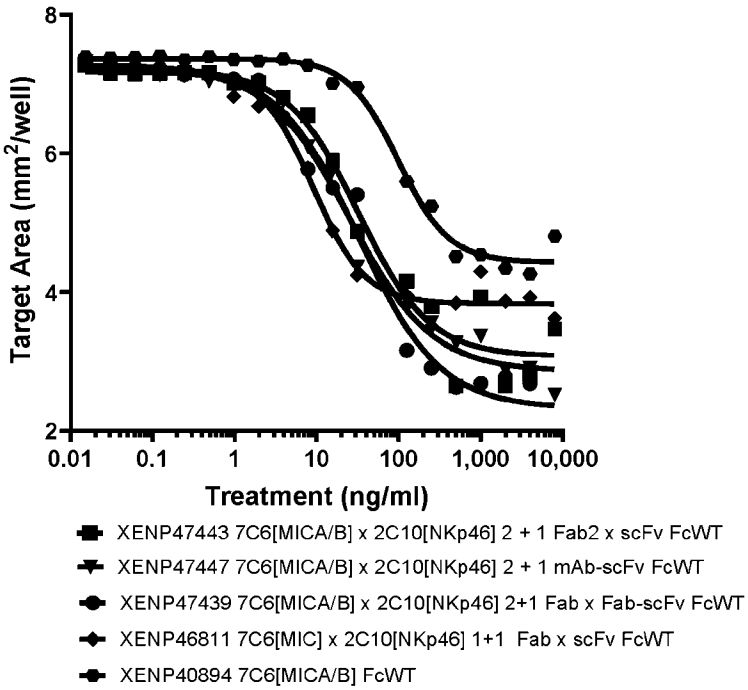


Fig. 62

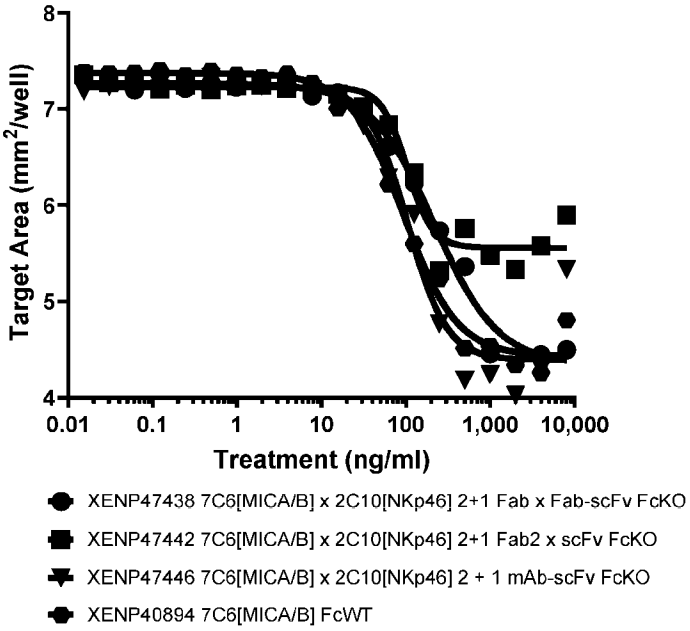

Target Area (mm²/well)
8
7
6
5
4
0.01
0.1
1
10
100
1,000
10,000
Treatment (ng/ml)
XENP47438 7C6[MICA/B] x 2C10[NKp46] 2+1 Fab x Fab-scFv FcKO
XENP47442 7C6[MICA/B] x 2C10[NKp46] 2+1 Fab2 x scFv FcKO
XENP47446 7C6[MICA/B] x 2C10[NKp46] 2 + 1 mAb-scFv FcKO
XENP40894 7C6[MICA/B] FcWT

Fig. 63

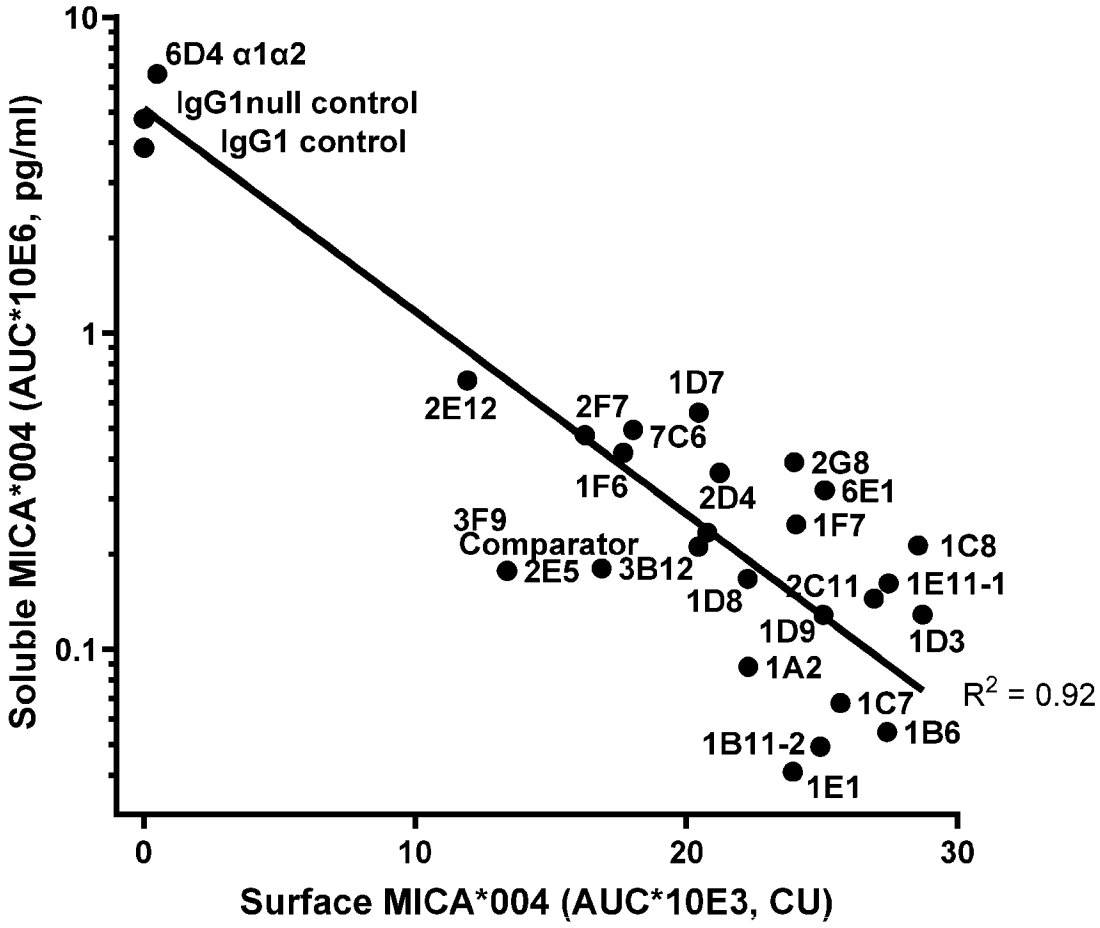

10
1
0.1
Soluble MICA*004 (AUC*10E6, pg/ml)
6D4 α1α2
IgG1null control
IgG1 control
2E12
2F7
1D7
7C6
1F6
2D4
2G8
6E1
1F7
3F9
Comparator
2E5
3B12
1D8
2C11
1E11-1
1C8
1D3
1D9
1A2
1C7
1B6
1B11-2
1E1
R2 = 0.92
0
10
20
30
Surface MICA*004 (AUC*10E3, CU)

Fig. 64

Fig. 64A

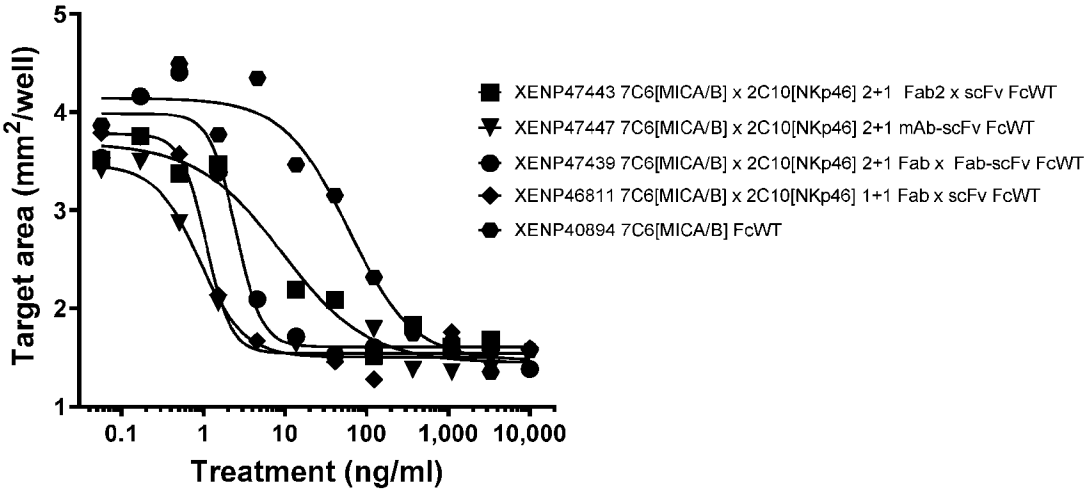


Fig. 64B

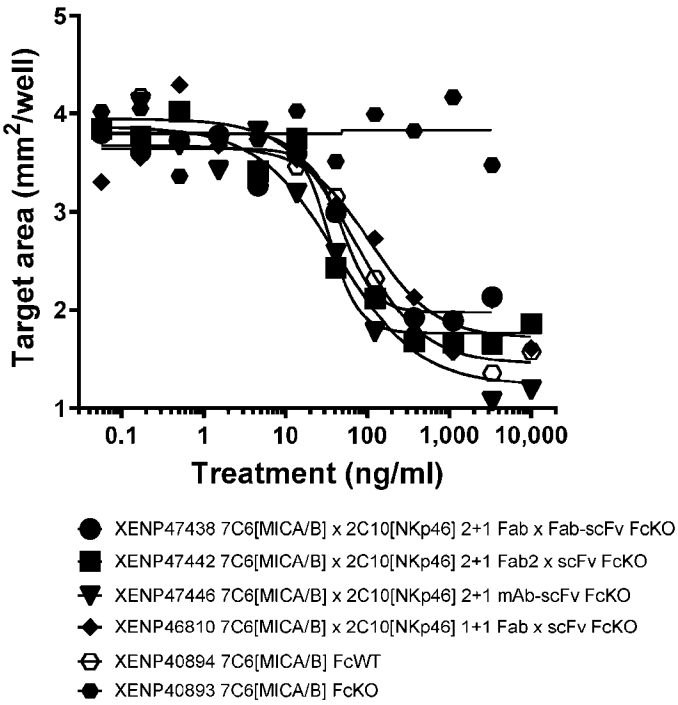


Fig. 65

Fig. 65A

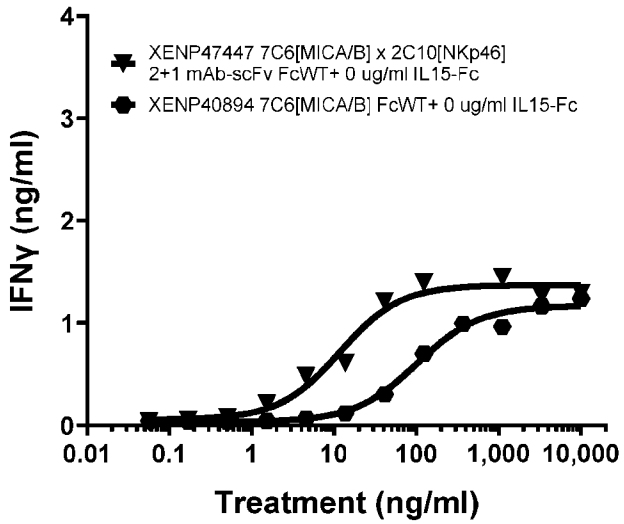


Fig. 65B

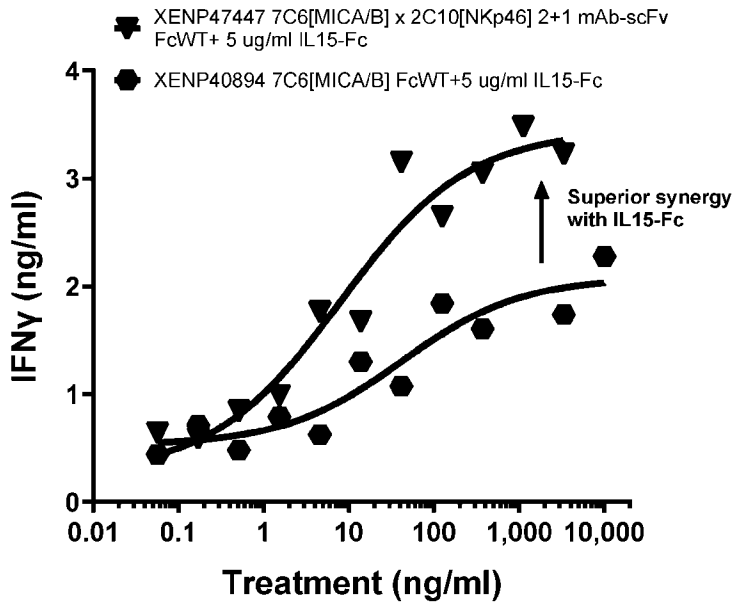


Fig. 66

>XENP24045 human_IL15_D30N/E64Q/N65D_(GGGGS)1-human_IL15Ra(Sushi)_(GGGGS)1_Fc(216)_IgG1_pI(-)_Isosteric_A_C220S/PVA_/S267K/L368D/K370S-Fc(216)_IgG1_C220S/PVA_/S267K/S364K/E357Q

Chain 1 - human_IL15_D30N/E64Q/N65D_(GGGGS)1_Fc(216)_IgG1_pI(-)_Isosteric_A_C220S/PVA_/S267K/L368D/K370S (SEQ ID NO: XXX)

NWVNVISDLKKIEDLIQSMHIDATLYTESNVHPSCKVTAMKCFLLELQVISLESGDASIHDTVQDLIILANNSLS
SNGNVTESGCKECEELEEKNIKEFLQSFVHIVQMFINTSGGGGSEPKSSDKTHTCPPCPAPPVAGPSVFLFPPKP
KDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYNSTYRVVSVLTVLHQDWLNGKEYKCK
VSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGFYPSDIAVEWESDGQPENNYKTTPPV
LDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 - human_IL15Ra(Sushi)_(GGGGS)1_Fc(216)_IgG1_C220S/PVA_/S267K/S364K/E357Q (SEQ ID NO: XXX)

ITCPPPMSVEHADIWVKSYSLYSRERYICNSGFKRKAGTSSLTECVLNKATNVAHWTTPSLKCIRGGGGSEPKSS
DKTHTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEQY
NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKG
FYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPG
K

Fig. 67

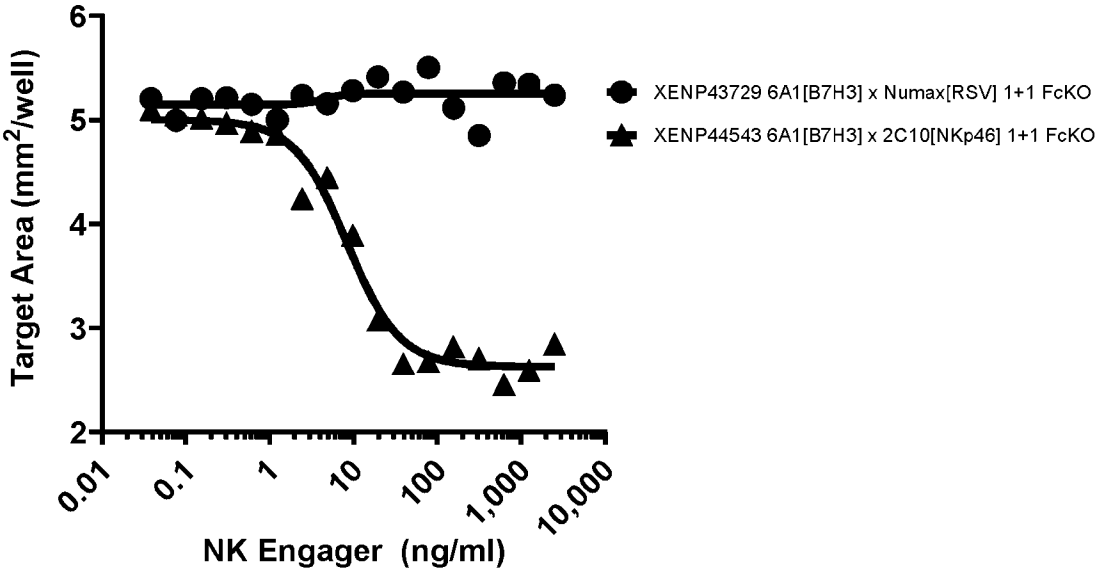

Target Area (mm2/well)
6
5
4
3
2
0.01
0.1
1
10
100
1,000
10,000
NK Engager (ng/ml)
XENP43729 6A1[B7H3] x Numax[RSV] 1+1 FcKO
XENP44543 6A1[B7H3] x 2C10[NKp46] 1+1 FcKO

Fig. 68

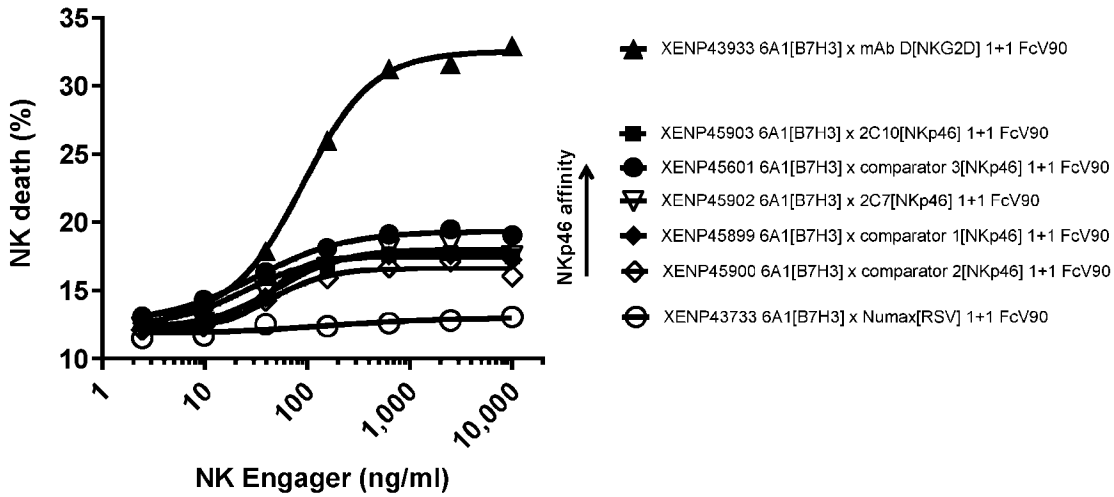

35
30
25
20
15
10
NK death (%)
1
10
100
1,000
10,000
NK Engager (ng/ml)
NKp46 affinity
XENP43933 6A1[B7H3] x mAb D[NKG2D] 1+1 FcV90
XENP45903 6A1[B7H3] x 2C10[NKp46] 1+1 FcV90
XENP45601 6A1[B7H3] x comparator 3[NKp46] 1+1 FcV90
XENP45902 6A1[B7H3] x 2C7[NKp46] 1+1 FcV90
XENP45899 6A1[B7H3] x comparator 1[NKp46] 1+1 FcV90
XENP45900 6A1[B7H3] x comparator 2[NKp46] 1+1 FcV90
XENP43733 6A1[B7H3] x Numax[RSV] 1+1 FcV90

Fig. 69

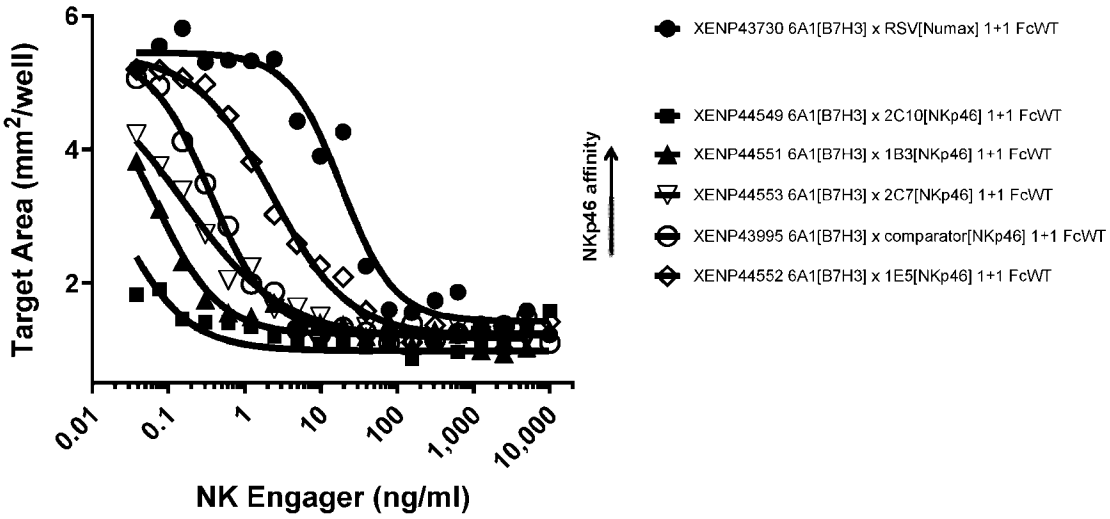

Target Area (mm²/well)
6
4
2
0.01
0.1
1
10
100
1,000
10,000
NK Engager (ng/ml)
NKp46 affinity
XENP43730 6A1[B7H3] x RSV[Numax] 1+1 FcWT
XENP44549 6A1[B7H3] x 2C10[NKp46] 1+1 FcWT
XENP44551 6A1[B7H3] x 1B3[NKp46] 1+1 FcWT
XENP44553 6A1[B7H3] x 2C7[NKp46] 1+1 FcWT
XENP43995 6A1[B7H3] x comparator[NKp46] 1+1 FcWT
XENP44552 6A1[B7H3] x 1E5[NKp46] 1+1 FcWT

Fig. 70

Fig. 70A

>XENP43729_6A1[B7H3]_H1L1_Fab-Numax_VHVL_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_PVA_/S267K/L368D/K370S-Fc(216)_IgG1_C220S/PVA_/S267K/S364K/E357Q

Chain 1 (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSNYYMAWVRQAPGKGLEWVSSISTGGGSTYYRDSVKGRFTISRDNS
KSTLYLQMNSLRAEDTAVYYCTTDLSAIAATPFAYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCD
KTHTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYN
STYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGF
YPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 (SEQ ID NO: XXX)

QVTLRESGPALVKPTQTLTLTCTFSGFSLSTAGMSVGWIRQPPGKALEWLADIWWDDKKHYNPSLKDRLTISKDT
SKNQVVLKVTNMDPADTATYYCARDMIFNFYFDVWGQGTTVTVSSGKPGSGKPGSGKPGSGKPGSDIQMTQSPST
LSASVGDRVTITCSASSRVGYMHWYQQKPGKAPKLLIYDTSKLASGVPSRFSGSGSGTEFTLTISSLQPDDFATY
YCFQGSGYPFTFGGGTKVEIKEPKSSDKTHTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHED
PEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPRE
PQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQG
NVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 (SEQ ID NO: XXX)

DIQMTQSPSSLSASVGDRVTITCRASQNIYTSLAWYQQKPGKAPKLLIYNAHSLQTGIPSRFSGSGSGADFTLTI
SSLQPEDFATYFCQQYYSGLTFGSGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVD
NALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

XENP45899_6A1[B7H3]_H1L1_Fab-comparator 1_antiNKp46_1[NKp46]_H1L1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_S239D/I332E/L368D/K370S-Fc(216)_IgG1_C220S/S239D/I332E/S364K/E357Q

Chain 1 (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSNYYMAWVRQAPGKGLEWVSSISTGGGSTYYRDSVKGRFTISRDNS
KSTLYLQMNSLRAEDTAVYYCTTDLSAIAATPFAYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCD
KTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEY
NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSG
FYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPG
K

Chain 2 (SEQ ID NO: XXX)

QVQLVQSGAEVKKPGSSVKVSCKASGYTFSDYVINWVRQAPGQGLEWMGEIYPGSGTNYYNEKFKAKATITADKS
TSTAYMELSSLRSEDTAVYYCARRGRYGLYAMDYWGQGTTVTVSSGKPGSGKPGSGKPGSGKPGSDIQMTQSPSS
LSASVGDRVTITCRASQDISNYLNWYQQKPGKAPKLLIYYTSRLHSGVPSRFSGSGSGTDFTFTISSLQPEDIAT
YFCQQGNTRPWTFGGGTKVEIKEPKSSDKTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSH
EDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQP
REPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQ
QGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 (SEQ ID NO: XXX)

DIQMTQSPSSLSASVGDRVTITCRASQNIYTSLAWYQQKPGKAPKLLIYNAHSLQTGIPSRFSGSGSGADFTLTI
SSLQPEDFATYFCQQYYSGLTFGSGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVD
NALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 70B

XENP45900_6A1[B7H3]_H1L1_Fab-comparator 2_antiNKp46_4[NKp46]_H1L1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_S239D/I332E/L368D/K370S-Fc(216)_IgG1_C220S/S239D/I332E/S364K/E357Q

Chain 1 (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSNYYMAWVRQAPGKGLEWVSSISTGGGSTYYRDSVKGRFTISRDNS
KSTLYLQMNSLRAEDTAVYYCTTDLSAIAATPFAYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCD
KTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEY
NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSG
FYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPG
K

Chain 2 (SEQ ID NO: XXX)

QVQLVQSGAEVKKPGASVKVSCKASGYTFTSFTMHWVRQAPGQGLEWIGYINPSSGYTEYNQKFKDRVTITADKS
TSTAYMELSSLRSEDTAVYYCVRGSSRGFDYWGQGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIQMTQSPSSLSA
SVGDRVTITCRASENIYSNLAWFQQKPGKAPKLLVYAATNLADGVPSRFSGSGSGTDYTLTISSLQPEDFATYYC
QHFWGTPRTFGGGTKVEIKEPKSSDKTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDP
EVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREP
QVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGN
VFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 (SEQ ID NO: XXX)

DIQMTQSPSSLSASVGDRVTITCRASQNIYTSLAWYQQKPGKAPKLLIYNAHSLQTGIPSRFSGSGSGADFTLTI
SSLQPEDFATYFCQQYYSGLTFGSGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVD
NALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

XENP43733_6A1[B7H3]_H1L1_Fab-Numax_VHVL_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_S239D/I332E/L368D/K370S-Fc(216)_IgG1_C220S/S239D/I332E/S364K/E357Q

Chain 1 (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSNYYMAWVRQAPGKGLEWVSSISTGGGSTYYRDSVKGRFTISRDNS
KSTLYLQMNSLRAEDTAVYYCTTDLSAIAATPFAYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCD
KTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEY
NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSG
FYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPG
K

Chain 2 (SEQ ID NO: XXX)

QVTLRESGPALVKPTQTLTLTCTFSGFSLSTAGMSVGWIRQPPGKALEWLADIWWDDKKHYNPSLKDRLTISKDT
SKNQVVLKVTNMDPADTATYYCARDMIFNFYFDVWGQGTTVTVSSGKPGSGKPGSGKPGSGKPGSDIQMTQSPST
LSASVGDRVTITCSASSRVGYMHWYQQKPGKAPKLLIYDTSKLASGVPSRFSGSGSGTEFTLTISSLQPDDFATY
YCFQGSGYPFTFGGGTKVEIKEPKSSDKTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHE
DPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPR
EPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQ
GNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 (SEQ ID NO: XXX)

DIQMTQSPSSLSASVGDRVTITCRASQNIYTSLAWYQQKPGKAPKLLIYNAHSLQTGIPSRFSGSGSGADFTLTI
SSLQPEDFATYFCQQYYSGLTFGSGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVD
NALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 70C

XENP43730_6A1[B7H3]_H1L1_Fab-Numax_VHVL_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S-Fc(216)_IgG1_C220S/S364K/E357Q

Chain 1 (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSNYYMAWVRQAPGKGLEWVSSISTGGGSTYYRDSVKGRFTISRDNS
KSTLYLQMNSLRAEDTAVYYCTTDLSAIAATPFAYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCD
KTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEY
NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSG
FYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPG
K

Chain 2 (SEQ ID NO: XXX)

QVTLRESGPALVKPTQTLTLTCTFSGFSLSTAGMSVGWIRQPPGKALEWLADIWWDDKKHYNPSLKDRLTISKDT
SKNQVVLKVTNMDPADTATYYCARDMIFNFYFDVWGQGTTVTVSSGKPGSGKPGSGKPGSGKPGSDIQMTQSPST
LSASVGDRVTITCSASSRVGYMHWYQQKPGKAPKLLIYDTSKLASGVPSRFSGSGSGTEFTLTISSLQPDDFATY
YCFQGSGYPFTFGGGTKVEIKEPKSSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHE
DPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR
EPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQ
GNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 (SEQ ID NO: XXX)

DIQMTQSPSSLSASVGDRVTITCRASQNIYTSLAWYQQKPGKAPKLLIYNAHSLQTGIPSRFSGSGSGADFTLTI
SSLQPEDFATYFCQQYYSGLTFGSGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVD
NALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

XENP45601_6A1[B7H3]_H1L1_Fab-comparator 3[NKp46]_H1L1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_S239D/I332E/L368D/K370S-Fc(216)_IgG1_C220S/S239D/I332E/S364K/E357Q

Chain 1 (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSNYYMAWVRQAPGKGLEWVSSISTGGGSTYYRDSVKGRFTISRDNS
KSTLYLQMNSLRAEDTAVYYCTTDLSAIAATPFAYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCD
KTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEY
NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSG
FYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPG
K

Chain 2 (SEQ ID NO: XXX)

QVQLVQSGAEVKKPGASVKVSCKASGYTFTSYWMHWIRQAPGQGLEWMGHINPSTDYTAYNQKFQGRVTMTADKS
TSTAYMELSSLRSEDTAVYYCALTGRFAYWGQGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIQMTQSPSSLSASV
GDRVTITCRASQDIGSSLNWLQQKPGKTIKRLIYATSSLDSGVPKRFSGSRSGSDYTLTISSLQPEDFATYYCLQ
YATSPFTFGSGTKLEIKEPKSSDKTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEV
KFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQV
YTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVF
SCSVMHEALHNHYTQKSLSLSPGK

Chain 3 (SEQ ID NO: XXX)

DIQMTQSPSSLSASVGDRVTITCRASQNIYTSLAWYQQKPGKAPKLLIYNAHSLQTGIPSRFSGSGSGADFTLTI
SSLQPEDFATYFCQQYYSGLTFGSGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVD
NALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 70D

XENP43933_6A1[B7H3]_H1L1_Fab-mAb D[NKG2D]_H1L1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_S239D/I332E/L368D/K370S-Fc(216)_IgG1_C220S/S239D/I332E/S364K/E357Q

Chain 1 (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSNYYMAWVRQAPGKGLEWVSSISTGGGSTYYRDSVKGRFTISRDNS
KSTLYLQMNSLRAEDTAVYYCTTDLSAIAATPFAYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCD
KTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEY
NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSG
FYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPG
K

Chain 2 (SEQ ID NO: XXX)

QVQLVQSGAEVKKPGASVKVSCKASGYTFTNYWMHWVRQAPGQGLEWMGEIDPSDIYTNYAQKFQGRVTMTRDTS
TSTVYMELSSLRSEDTAVYYCARGIYDGYYVYGMDYWGQGTTVTVSSGKPGSGKPGSGKPGSGKPGSYIQMTQSP
SSLSASVGDRVTITCRSSQDISNYLNWYQQKPGKAPKLLIYYTSRLHSGVPSRFSGSGSGTDFTFTISSLQPEDI
ATYYCQQGKTLPRTFGGGTKVEIKEPKSSDKTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDV
SHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKG
QPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSR
WQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 (SEQ ID NO: XXX)

DIQMTQSPSSLSASVGDRVTITCRASQNIYTSLAWYQQKPGKAPKLLIYNAHSLQTGIPSRFSGSGSGADFTLTI
SSLQPEDFATYFCQQYYSGLTFGSGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVD
NALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

XENP43995_6A1[B7H3]_H1L1_Fab_comparator 1[NKp46]_H1L1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S-Fc(216)_IgG1_C220S/S364K/E357Q

Chain 1 (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSNYYMAWVRQAPGKGLEWVSSISTGGGSTYYRDSVKGRFTISRDNS
KSTLYLQMNSLRAEDTAVYYCTTDLSAIAATPFAYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCD
KTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEY
NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSG
FYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPG
K

Chain 2 (SEQ ID NO: XXX)

QVQLVQSGAEVKKPGSSVKVSCKASGYTFSDYVINWVRQAPGQGLEWMGEIYPGSGTNYYNEKFKAKATITADKS
TSTAYMELSSLRSEDTAVYYCARRGRYGLYAMDYWGQGTTVTVSSGKPGSGKPGSGKPGSGKPGSDIQMTQSPSS
LSASVGDRVTITCRASQDISNYLNWYQQKPGKAPKLLIYYTSRLHSGVPSRFSGSGSGTDFTFTISSLQPEDIAT
YFCQQGNTRPWTFGGGTKVEIKEPKSSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSH
EDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQP
REPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQ
QGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 (SEQ ID NO: XXX)

DIQMTQSPSSLSASVGDRVTITCRASQNIYTSLAWYQQKPGKAPKLLIYNAHSLQTGIPSRFSGSGSGADFTLTI
SSLQPEDFATYFCQQYYSGLTFGSGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVD
NALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 71

Fig. 71A

>XENP44543_6A1[B7H3]_H1L1_Fab-2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_PVA_/S267K/L368D/K370S-Fc(216)_IgG1_C220S/PVA_/S267K/S364K/E357Q

Chain 1 (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSNYYMAWVRQAPGKGLEWVSSISTGGGSTYYRDSVKGRFTISRDNS
KSTLYLQMNSLRAEDTAVYYCTTDLSAIAATPFAYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCD
KTHTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHEDPEVKFNWYVDGVEVHNAKTKPREEEYN
STYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSGF
YPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 2 (SEQ ID NO: XXX)

QVQLVQSGAEVKKPGSSVKVSCKASGGTFSNYAIHWVRQAPGQGLEWMGGIIPIFGLANYAQKFQGRVTITADES
TSTAYMELSSLRSEDTAVYYCARRGALWGNAFDYWGQGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIQMTQSPSS
LSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTDFTLTISSLQPEDFAT
YYCQQSYSTPYTFGQGTKLEIKEPKSSDKTHTCPPCPAPPVAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVKHE
DPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR
EPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQ
GNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 (SEQ ID NO: XXX)

DIQMTQSPSSLSASVGDRVTITCRASQNIYTSLAWYQQKPGKAPKLLIYNAHSLQTGIPSRFSGSGSGADFTLTI
SSLQPEDFATYFCQQYYSGLTFGSGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVD
NALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

XENP45903_6A1[B7H3]_H1L1_Fab-2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_S239D/I332E/L368D/K370S-Fc(216)_IgG1_C220S/S239D/I332E/S364K/E357Q

Chain 1 (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSNYYMAWVRQAPGKGLEWVSSISTGGGSTYYRDSVKGRFTISRDNS
KSTLYLQMNSLRAEDTAVYYCTTDLSAIAATPFAYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCD
KTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEY
NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSG
FYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPG
K

Chain 2 (SEQ ID NO: XXX)

QVQLVQSGAEVKKPGSSVKVSCKASGGTFSNYAIHWVRQAPGQGLEWMGGIIPIFGLANYAQKFQGRVTITADES
TSTAYMELSSLRSEDTAVYYCARRGALWGNAFDYWGQGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIQMTQSPSS
LSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTDFTLTISSLQPEDFAT
YYCQQSYSTPYTFGQGTKLEIKEPKSSDKTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSH
EDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQP
REPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQ
QGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 (SEQ ID NO: XXX)

DIQMTQSPSSLSASVGDRVTITCRASQNIYTSLAWYQQKPGKAPKLLIYNAHSLQTGIPSRFSGSGSGADFTLTI
SSLQPEDFATYFCQQYYSGLTFGSGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVD
NALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 71B

XENP45902_6A1[B7H3]_H1L1_Fab-2C7A3.376[NKp46]_H1L1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_S239D/I332E/L368D/K370S-Fc(216)_IgG1_C220S/S239D/I332E/S364K/E357Q

Chain 1 (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSNYYMAWVRQAPGKGLEWVSSISTGGGSTYYRDSVKGRFTISRDNS
KSTLYLQMNSLRAEDTAVYYCTTDLSAIAATPFAYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCD
KTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEY
NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSG
FYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPG
K

Chain 2 (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSAIGGTGGNTNYADSVKGRFTISRDNS
KNTLYLQMNSLRAEDTAVYYCAKGAYSGSYYGLGLFDYWGQGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIVMTQ
SPDSLAVSLGERATINCKSSQSVLYSSNNKNYLAWYQQKPGQPPKLLIYWASTRESGVPDRFSGSGSGTDFTLTI
SSLQAEDVAVYYCQQYYSTPYTFGQGTKLEIKEPKSSDKTHTCPPCPAPELLGGPDVFLFPPKPKDTLMISRTPE
VTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPEE
KTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYS
KLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 (SEQ ID NO: XXX)

DIQMTQSPSSLSASVGDRVTITCRASQNIYTSLAWYQQKPGKAPKLLIYNAHSLQTGIPSRFSGSGSGADFTLTI
SSLQPEDFATYFCQQYYSGLTFGSGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVD
NALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

XENP44549_6A1[B7H3]_H1L1_Fab-2C10A3.372[NKp46]_H1L1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S-Fc(216)_IgG1_C220S/S364K/E357Q

Chain 1 (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSNYYMAWVRQAPGKGLEWVSSISTGGGSTYYRDSVKGRFTISRDNS
KSTLYLQMNSLRAEDTAVYYCTTDLSAIAATPFAYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCD
KTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEY
NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSG
FYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPG
K

Chain 2 (SEQ ID NO: XXX)

QVQLVQSGAEVKKPGSSVKVSCKASGGTFSNYAIHWVRQAPGQGLEWMGGIIPIFGLANYAQKFQGRVTITADES
TSTAYMELSSLRSEDTAVYYCARRGALWGNAFDYWGQGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIQMTQSPSS
LSASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTDFTLTISSLQPEDFAT
YYCQQSYSTPYTFGQGTKLEIKEPKSSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSH
EDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQP
REPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQ
QGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 (SEQ ID NO: XXX)

DIQMTQSPSSLSASVGDRVTITCRASQNIYTSLAWYQQKPGKAPKLLIYNAHSLQTGIPSRFSGSGSGADFTLTI
SSLQPEDFATYFCQQYYSGLTFGSGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVD
NALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 71C

XENP44551_6A1[B7H3]_H1L1_Fab-1B3A3.373A[NKp46]_H1L1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S-Fc(216)_IgG1_C220S/S364K/E357Q

Chain 1 (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSNYYMAWVRQAPGKGLEWVSSISTGGGSTYYRDSVKGRFTISRDNS
KSTLYLQMNSLRAEDTAVYYCTTDLSAIAATPFAYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCD
KTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEY
NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSG
FYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPG
K

Chain 2 (SEQ ID NO: XXX)

QVQLVQSGAEVKKPGSSVKVSCKASGGTFSSYAISWVRQAPGQGLEWMGGIIPVFGSAHYAQKFQGRVTITADES
TSTAYMELSSLRSEDTAVYYCAREDVARGYLDYWGQGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIQMTQSPSSL
SASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTDFTLTISSLQPEDFATY
YCQQSYSTPYTFGQGTKLEIKEPKSSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHE
DPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR
EPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQ
GNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 (SEQ ID NO: XXX)

DIQMTQSPSSLSASVGDRVTITCRASQNIYTSLAWYQQKPGKAPKLLIYNAHSLQTGIPSRFSGSGSGADFTLTI
SSLQPEDFATYFCQQYYSGLTFGSGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVD
NALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

XENP44553_6A1[B7H3]_H1L1_Fab-2C7A3.376[NKp46]_H1L1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S-Fc(216)_IgG1_C220S/S364K/E357Q

Chain 1 (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSNYYMAWVRQAPGKGLEWVSSISTGGGSTYYRDSVKGRFTISRDNS
KSTLYLQMNSLRAEDTAVYYCTTDLSAIAATPFAYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCD
KTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEY
NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSG
FYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPG
K

Chain 2 (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSSYAMSWVRQAPGKGLEWVSAIGGTGGNTNYADSVKGRFTISRDNS
KNTLYLQMNSLRAEDTAVYYCAKGAYSGSYYGLGLFDYWGQGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIVMTQ
SPDSLAVSLGERATINCKSSQSVLYSSNNKNYLAWYQQKPGQPPKLLIYWASTRESGVPDRFSGSGSGTDFTLTI
SSLQAEDVAVYYCQQYYSTPYTFGQGTKLEIKEPKSSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPE
VTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIE
KTISKAKGQPREPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYS
KLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Chain 3 (SEQ ID NO: XXX)

DIQMTQSPSSLSASVGDRVTITCRASQNIYTSLAWYQQKPGKAPKLLIYNAHSLQTGIPSRFSGSGSGADFTLTI
SSLQPEDFATYFCQQYYSGLTFGSGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVD
NALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 71D

XENP44552_6A1[B7H3]_H1L1_Fab-1E5A4.374[NKp46]_H1L1_scFv(GKPGS)4-IgG1_pI(-)_Isosteric_A_L368D/K370S-Fc(216)_IgG1_C220S/S364K/E357Q

Chain 1 (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSNYYMAWVRQAPGKGLEWVSSISTGGGSTYYRDSVKGRFTISRDNS
KSTLYLQMNSLRAEDTAVYYCTTDLSAIAATPFAYWGQGTLVTVSSASTKGPSVFPLAPSSKSTSGGTAALGCLV
KDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSDTKVDKKVEPKSCD
KTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEEY
NSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCDVSG
FYPSDIAVEWESDGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWEQGDVFSCSVMHEALHNHYTQKSLSLSPG
K

Chain 2 (SEQ ID NO: XXX)

EVQLLESGGGLVQPGGSLRLSCAASGFTFSGYAMSWVRQAPGKGLEWVSIISGSGATYYYADSVKGRFTISRDNS
KNTLYLQMNSLRAEDTAVYYCAKEGYLYSQMDIWGQGTLVTVSSGKPGSGKPGSGKPGSGKPGSDIQMTQSPSSL
SASVGDRVTITCRASQSISSYLNWYQQKPGKAPKLLIYAASSLQSGVPSRFSGSGSGTDFTLTISSLQPEDFATY
YCQQSYSTPYTFGQGTKLEIKEPKSSDKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHE
DPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPR
EPQVYTLPPSREQMTKNQVKLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQ
GNVFSCSVMHEALHNHYTQKSLSLSPGK

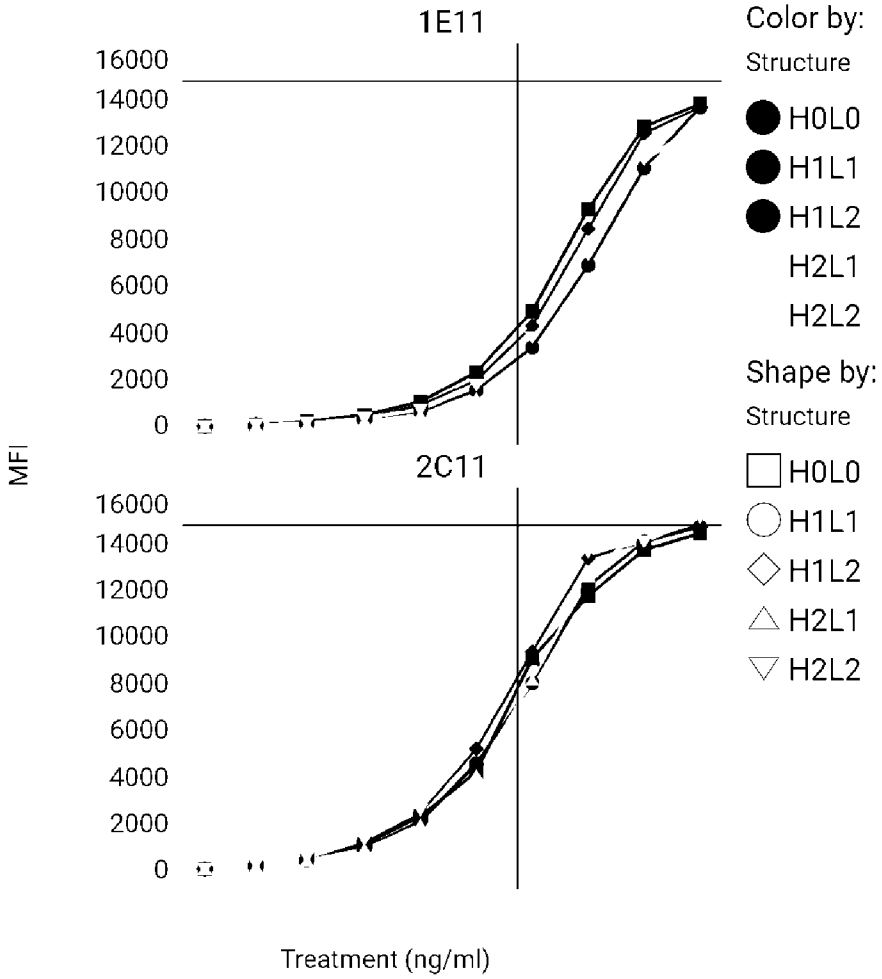
Chain 3 (SEQ ID NO: XXX)

DIQMTQSPSSLSASVGDRVTITCRASQNIYTSLAWYQQKPGKAPKLLIYNAHSLQTGIPSRFSGSGSGADFTLTI
SSLQPEDFATYFCQQYYSGLTFGSGTKLEIKRTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVD
NALQSGNSQESVTEQDSKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC

Fig. 72

MICA/B binding domain		Shed Inhibition (30 ug/mL)		LSA kD (M)		
Clone name	**XENP**	**sMICA pg/mL**	**% Shed Inhibition**	**huMICA**	**huMICB**	**cynoMICA**
2C11	XENP46976	5361.53	87.08	1.78E-08	2.59E-09	N/A
1B11-2	XENP46958	3852.50	92.63	2.83E-09	1.11E-09	4.81E-09
1C7	XENP46959	3777.00	92.91	2.29E-08	2.27E-09	2.38E-08
1D7	XENP46960	4833.35	89.02	3.44E-10	1.47E-09	2.97E-09
1A2	XENP46961	2984.74	95.83	2.13E-09	1.81E-10	7.36E-09
1B6	XENP46962	5550.16	86.38	5.85E-09	1.05E-09	8.03E-09
1C8	XENP46963	4946.53	88.60	2.06E-08	7.72E-09	1.51E-08
1D8	XENP46967	6531.06	82.77	4.67E-08	4.50E-09	4.39E-08
1D9	XENP46968	5286.08	87.35	1.28E-08	4.53E-10	1.95E-08
1E1	XENP46969	6757.42	81.93	1.22E-08	2.23E-09	1.17E-08
1E11-1	XENP46970	6040.61	84.57	4.03E-08	5.28E-08	1.96E-08
2E5	XENP46973	4380.63	90.69	5.99E-10	8.07E-10	1.31E-08
2F7	XENP46978	7210.14	80.27	4.24E-08	9.77E-09	8.75E-08
2E12	XENP46979	16528.67	45.94	1.67E-08	4.68E-09	5.38E-08
1H7	XENP47075	14717.79	52.61	7.50E-08	2.54E-07	1.38E-07

Fig. 73


1E11
2C11
16000
14000
12000
10000
8000
6000
4000
2000
0
MFI
Treatment (ng/ml)
Color by:
Structure
H0L0
H1L1
H1L2
H2L1
H2L2
Shape by:
Structure
H0L0
H1L1
H1L2
H2L1
H2L2

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2024/051832

Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.c of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of a sequence listing:

   a. ☐ forming part of the international application as filed.

   b. ☒ furnished subsequent to the international filing date for the purposes of international search (Rule 13*ter*.1(a)).

      ☒ accompanied by a statement to the effect that the sequence listing does not go beyond the disclosure in the international application as filed.

2. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, this report has been established to the extent that a meaningful search could be carried out without a WIPO Standard ST.26 compliant sequence listing.

3. Additional comments:

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2024/051832

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims;; it is covered by claims Nos.:
1-10(partially)

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.

☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2024/051832

A. CLASSIFICATION OF SUBJECT MATTER
INV. C07K16/10 C07K16/28
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2023/196598 A2 (D2M BIOTHERAPEUTICS LTD; ZHANG DONG [US]) 12 October 2023 (2023-10-12) figures 1-15; examples 1-10	1-10
A	WO 2018/047154 A1 (YISSUM RES DEV CO OF HEBREW UNIV JERUSALEM LTD [IL] ET AL.) 15 March 2018 (2018-03-15) example 1	1-10
X	WO 2018/217688 A1 (DANA FARBER CANCER INST INC [US]; FERRARI DE ANDRADE LUCAS [US] ET AL.) 29 November 2018 (2018-11-29) figure 1; examples 1-5	1-10
X	WO 2019/183551 A1 (BRISTOL MYERS SQUIBB CO [US]) 26 September 2019 (2019-09-26) examples 1-5	1-10

-/--

[x] Further documents are listed in the continuation of Box C.

[x] See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance;; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance;; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
17 January 2025	25/03/2025

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Potthast, Maria

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Form PCT/ISA/210 (second sheet) (April 2005)

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2024/051832

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2020/028428 A2 (PDI THERAPEUTICS INC [US]) 6 February 2020 (2020-02-06) figure 1; example 4	1-10
X,P	ZHANG TIAN ET AL: "Synergistic targeting of multiple activating pathways with natural killer cell engagers", SOCIETY FOR IMMUNOTHERAPY OF CANCER - SITC 2023, 5 November 2023 (2023-11-05), XP093239786, the entire document	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2024/051832

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2023196598 A2	12-10-2023	EP 4504791 A2	12-02-2025
		WO 2023196598 A2	12-10-2023
WO 2018047154 A1	15-03-2018	EP 3510047 A1	17-07-2019
		JP 2020501506 A	23-01-2020
		US 2018207290 A1	26-07-2018
		WO 2018047154 A1	15-03-2018
WO 2018217688 A1	29-11-2018	EP 3661552 A1	10-06-2020
		US 2020165343 A1	28-05-2020
		US 2023120420 A1	20-04-2023
		WO 2018217688 A1	29-11-2018
WO 2019183551 A1	26-09-2019	AU 2019236865 A1	01-10-2020
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		EP 3768715 A1	27-01-2021
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		KR 20200135830 A	03-12-2020
		PE 20210665 A1	31-03-2021
		SG 11202008767X A	29-10-2020
		TW 202003565 A	16-01-2020
		US 2019315870 A1	17-10-2019
		US 2022281980 A1	08-09-2022
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		SG 11202100981T A	25-02-2021
		US 2021253711 A1	19-08-2021
		US 2025034262 A1	30-01-2025
		WO 2020028428 A2	06-02-2020

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-10(partially)

A MICA/B antigen binding domain comprising a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: items (i) to (v) of claim 1, I.e., clone 1E11_1 (murine H0L0 as well as humanized versions H1L1, H1L2, H2L1 and H2L2).

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2. claims: 1-10(partially)

A MICA/B antigen binding domain comprising a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: items (vi) to(x) of claim 1 (clone 2E5).

---

3. claims: 1-10(partially)

A MICA/B antigen binding domain comprising a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: items (xi) to (xv) of claim 1 (clone 2E12).

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4. claims: 1-10(partially)

A MICA/B antigen binding domain comprising a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: items (xvi) to (xx) of claim 1 (clone 2F7).

---

5. claims: 1-10(partially)

A MICA/B antigen binding domain comprising a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: items (xxi) to (xxv) of claim 1 (clone 1C7).

---

6. claims: 1-10(partially)

A MICA/B antigen binding domain comprising a set of vhCDR1-3 and vlCDR1-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: items (xxvi) to (xxx) of claim 1 (clone 1D7).

---

7. claims: 1-10(partially)

A MICA/B antigen binding domain comprising a set of vhCDR1-3

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

and vlCDRl-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: items (xxxi) to(xxxv) of claim 1 (clone 1A2).

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8. claims: 1-10(partially)

A MICA/B antigen binding domain comprising a set of vhCDRl-3 and vlCDRl-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: items (xxxvi) to(xl) of claim 1 (clone 2C11).

9-24. claims: 1-10(partially)

A MICA/B antigen binding domain comprising a set of vhCDRl-3 and vlCDRl-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: items (xli) to (lvi) of claim 1, wherein each item represents a single independent invention (i.e., each invention covers one independent antibody clone).

---

25. claims: 11-20

A NKp46 antigen binding domain comprising a set of vhCDRl-3 and vlCDRl-3 from a variable heavy domain and variable light domain pair selected from the group consisting of: SEQ ID NOs: XXX-XXX for vhCDRl-3 and SEQ ID NOs: XXX-XXX for vlCDRl-3 of 2C10A3.372[NKp46]_Hl_2C10A3.372[NKp46]_Ll, as depicted in Figure 23.

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26. claims: 21-189

A heterodimeric antibody as defined in any of the independent claims: 21, 29, 55, 63, 89, 97, 123, 130, 156, or 164.
