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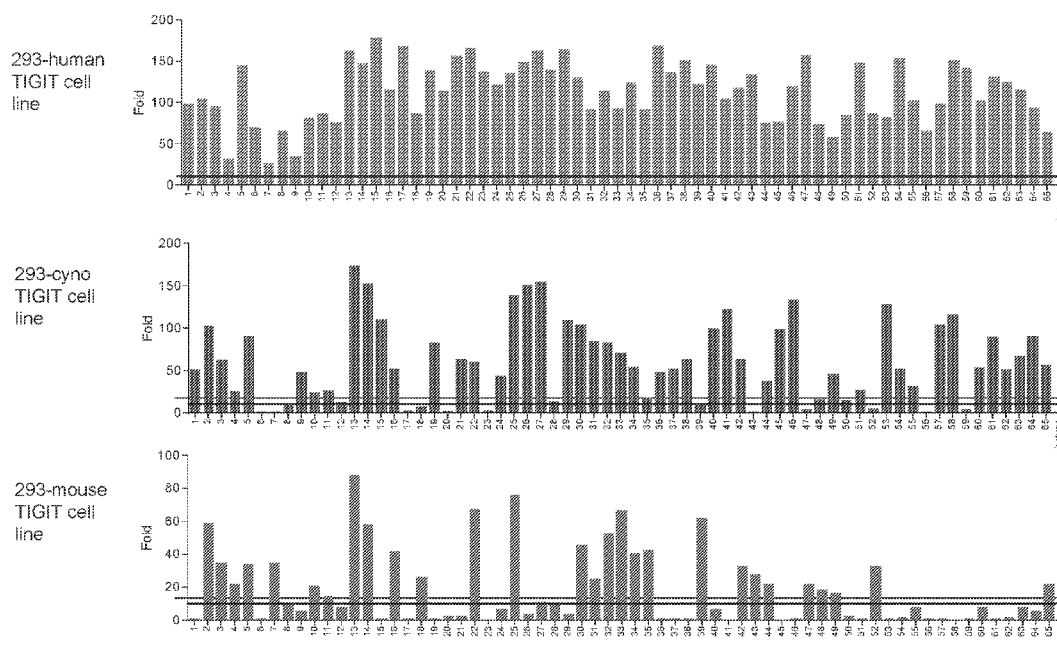
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(54) Title: ANTI-TIGIT ANTIBODIES

FIG. 1



(57) Abstract: Isolated antibodies that bind to human TIGIT (T-cell immunoreceptor with Ig and ITIM domains) are provided. In some embodiments, the antibody has a binding affinity (KD) for human TIGIT of less than 5 nM. In some embodiments, the anti-TIGIT antibody blocks binding of CD 155 and/or CD112 to TIGIT. In some embodiments, the antibodies are afucosylated.

EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,
MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,
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KM, ML, MR, NE, SN, TD, TG).

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- *with international search report (Art. 21(3))*
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INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
INV. C07K16/28
ADD. A61K39/00

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 A61K

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, BIOSIS, EMBASE, WPI Data, CHEM ABS Data, Sequence Search

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2017/030823 A2 (MERCK SHARP & DOHME [US]; WILLIAMS SYBIL M G [US] ET AL.) 23 February 2017 (2017-02-23)	1-8
Y	page 11, line 23 - page 11, line 32 page 56 - page 57; claims ----- -/--	9-184



Further documents are listed in the continuation of Box C.



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

30 January 2020

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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2019/047607

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	E. LOZANO ET AL: "The TIGIT/CD226 Axis Regulates Human T Cell Function", THE JOURNAL OF IMMUNOLOGY, vol. 188, no. 8, 16 March 2012 (2012-03-16), pages 3869-3875, XP055557788, US ISSN: 0022-1767, DOI: 10.4049/jimmunol.1103627 abstract page 3870, left-hand column, paragraph 4 - page 3872, left-hand column, paragraph 1; figures 1,2 -----	1-184
Y	N. STANIETSKY ET AL: "The interaction of TIGIT with PVR and PVRL2 inhibits human NK cell cytotoxicity", PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES, vol. 106, no. 42, 20 October 2009 (2009-10-20), pages 17858-17863, XP055215810, ISSN: 0027-8424, DOI: 10.1073/pnas.0903474106 abstract page 17858, right-hand column, paragraphs 1,2 page 17860 - page 17861; figures 1-6 -----	1-184
Y	STEVEN D. LEVIN ET AL: "Vstm3 is a member of the CD28 family and an important modulator of T-cell function", EUROPEAN JOURNAL OF IMMUNOLOGY, vol. 41, no. 4, 18 April 2011 (2011-04-18), pages 902-915, XP055215809, ISSN: 0014-2980, DOI: 10.1002/eji.201041136 the whole document -----	1-184
X,P	WO 2018/160704 A1 (ADIMAB LLC [US]) 7 September 2018 (2018-09-07) the whole document -----	1-184

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2019/047607

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.:
1-184(partially)
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.:

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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-184(partially)

Antibody according to claim 98 a) and the use thereof.

2-12. claims: 1-184(partially)

Antibody according to claim 98 b) to 98 l) respectively and the use thereof.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2019/047607

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2017030823 A2	23-02-2017	AU 2016307845 A1 CA 2994555 A1 CN 108290936 A EP 3334757 A2 JP 2018527919 A US 2018371083 A1 WO 2017030823 A2	08-03-2018 23-02-2017 17-07-2018 20-06-2018 27-09-2018 27-12-2018 23-02-2017
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