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[Continued on next page]

(54) **Title:** ANTI-ICAM-1 ANTIBODIES AND METHODS OF USE

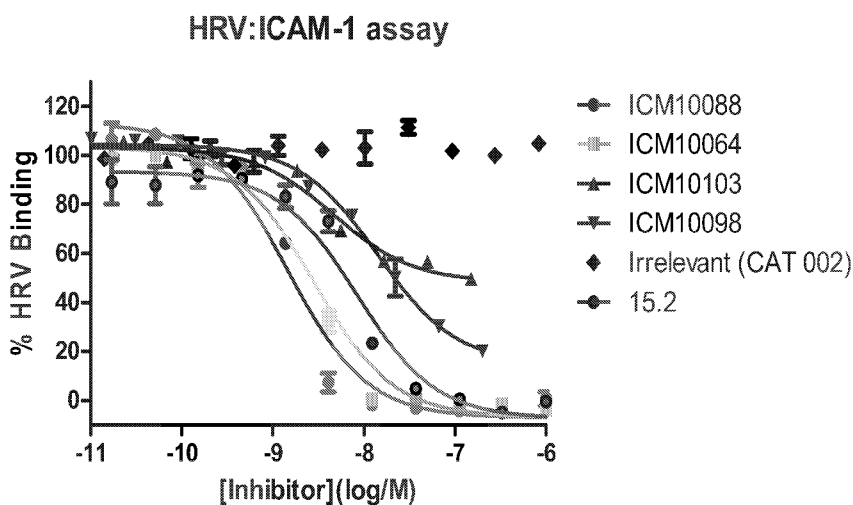


Fig. 1A

(57) **Abstract:** Provided are anti-ICAM-1 antibodies or antibody fragments and methods of using them. In certain embodiments, anti-ICAM-1 antibodies or antibody fragments of the invention inhibit binding of human ICAM-1 to human rhinovirus, and do not substantially inhibit binding of human ICAM-1 to LFA1.

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Published:

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— *with sequence listing part of description (Rule 5.2(a))*

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3 May 2012

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2011/064067

A. CLASSIFICATION OF SUBJECT MATTER
INV. C07K16/28 G01N33/50
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 G01N

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 practical, search terms used)
EPO-Internal, EMBASE, BIOSIS, Sequence Search, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	INOUE TERUO ET AL: "Lower expression of neutrophil adhesion molecule indicates less vessel wall injury and might explain lower restenosis rate after cutting balloon angioplasty", CIRCULATION, vol. 97, no. 25, 30 June 1998 (1998-06-30), pages 2511-2518, XP002662505, ISSN: 0009-7322 page 2513, column 2, paragraph 1 ----- -/--	1-253

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 document 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 31 October 2011	Date of mailing of the international search report 15/03/2012
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INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2011/064067

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	"Human ICAM-1/CD54 antibody Clone # 14C11", R&D Systems Catalog 23 April 2010 (2010-04-23), XP002662510, Retrieved from the Internet: URL:http://www.rndsystems.com/pdf/mab720.pdf [retrieved on 2011-10-27] the whole document	1-253
Y	----- PRESTA ET AL: "Engineering of therapeutic antibodies to minimize immunogenicity and optimize function", ADVANCED DRUG DELIVERY REVIEWS, vol. 58, no. 5-6, 7 August 2006 (2006-08-07), pages 640-656, XP024892146, ELSEVIER BV, AMSTERDAM, NL ISSN: 0169-409X, DOI: 10.1016/J.ADDR.2006.01.026 [retrieved on 2006-08-07] the whole document	1-253
A	----- DATABASE Geneseq [Online] 9 February 2006 (2006-02-09), "Human monoclonal antibody FUR1'CL VH region SEQ ID NO:73.", XP002662506, retrieved from EBI accession no. GSP:AEE61323 Database accession no. AEE61323 abstract; sequence	192
A	----- DATABASE Geneseq [Online] 25 June 2009 (2009-06-25), "Human ErbB2 binding related sequence SEQ 86.", XP002662507, retrieved from EBI accession no. GSP:AWP78120 Database accession no. AWP78120 abstract; sequence -----	192

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2011/064067

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.:

1-253(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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-253(partially)

Claims relating to the antibody ICM10064 (represented by VH and VL sequences SEQ ID Nos 2 and 7 respectively or by CDR sequences 3-5 and 8-10) and methods of use thereof

2-22. claims: 1-253(partially)

Claims relating to the antibodies ICM10064fgl, Icmo0014, Icmo0015, Icmo0016, Icmo0017, Icmo0018, Icmo0069, Icmo0070, Icmo0070_SGR, Icmo0072, Icmo0075, Icmo0079, Icmo0181, Icmo0183, Icmo0183fgl, Icmo0188, Icmo0189, Icmo0191, Icmo0191fgl, Icmo0194, Icmo0194fgl and methods of use thereof

23-32. claims: 1-253(partially)

Claims relating to the antibodies ICM10088, ICM1088fgl, ICM00004, ICM00007, ICM00008, Icmo0059, Icmo0060, Icmo0061, Icmo0066 and Icmo0068 and methods of use thereof

33. claims: 254-257

Claims relating to methods of detecting the interaction between a live virus and a host cell polypeptide and methods of screening for compounds inhibiting said interaction using FRET
