(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
24 January 2013 (24.01.2013)

WIPO | PCT

(10) International Publication Number
WO 2013/011062 A3

(51) **International Patent Classification**:
C07K 16/28 (2006.01) *A61P 19/00* (2006.01)
A61K 39/395 (2006.01)

(21) **International Application Number**:
PCT/EP2012/064109

(22) **International Filing Date**:
18 July 2012 (18.07.2012)

(25) **Filing Language**: English

(26) **Publication Language**: English

(30) **Priority Data**:
PCT/CN2011/001174 18 July 2011 (18.07.2011) CN
61/524,426 17 August 2011 (17.08.2011) US
PCT/CN2012/076144 28 May 2012 (28.05.2012) CN
61/662,643 21 June 2012 (21.06.2012) US

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(81) **Designated States** *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) **Designated States** *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, 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, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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

(88) **Date of publication of the international search report**:
21 March 2013

WO 2013/011062 A3

(54) **Title**: ANTAGONISTIC ANTIBODIES AGAINST OSCAR

(57) **Abstract**: The present disclosure relates to therapeutic antagonistic OSCAR antibodies. The present disclosure furthermore relates to use of such antibodies.

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2012/064109

A. CLASSIFICATION OF SUBJECT MATTER
INV. C07K16/28
ADD. A61K39/395 A61P19/00

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

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, 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 2010/040998 A1 (CAMBRIDGE ENTERPRISE LIMITED) 15 April 2010 (2010-04-15) cited in the application	1-6,8-14
Y	page 4, paragraph 4 page 11, paragraph 3 page 41, last paragraph - page 42, paragraph 1 page 44, paragraph 4 figure 4	7

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[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
15 August 2012	11/01/2013

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	Nooij, Frans

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	U. BRAND ET AL.: "Influence of extracellular matrix proteins on the development of cultured human dendritic cells.", EUROPEAN JOURNAL OF IMMUNOLOGY, vol. 28, no. 5, 1 May 1998 (1998-05-01), pages 1673-1680, XP002403016, Germany cited in the application abstract	1-14
A	E. MERCK ET AL.: "Fc-receptor gamma-chain activation via hOSCAR induces survival and maturation of dendritic cells and modulates Toll-like receptor responses.", BLOOD, vol. 105, no. 9, 1 May 2005 (2005-05-01), pages 3623-3632, XP002681827, USA cited in the application abstract	1-14
Y	WO 2009/053368 A1 (MERCK SERONO S.A.) 30 April 2009 (2009-04-30) figure 1 claims 1-3 page 2, last paragraph page 3, last paragraph	7

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2012/064109

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.:

1-14

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: 1-14

An antibody defined by structural features and that binds to human OSCAR and antagonizes OSCAR-induced effects. Pharmaceutical composition and therapeutic uses.

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2. claim: 15

Method for inducing collagen-dependent maturation of monocyte-derived dendritic cells (moDCs), wherein said method comprises incubating moDCs on a surface of essentially neutral charge in the presence of collagen.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/EP2012/064109

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2010040998 A1	15-04-2010	CA 2739679 A1	15-04-2010
		CN 102282169 A	14-12-2011
		EP 2344530 A1	20-07-2011
		US 2012028903 A1	02-02-2012
		WO 2010040998 A1	15-04-2010
WO 2009053368 A1	30-04-2009	AU 2008314697 A1	30-04-2009
		EP 2203180 A1	07-07-2010
		JP 2011500073 A	06-01-2011
		WO 2009053368 A1	30-04-2009