

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
6 December 2007 (06.12.2007)

PCT

(10) International Publication Number
WO 2007/140433 A3

(51) International Patent Classification:

C07K 1/04 (2006.01) *C07K 1/00* (2006.01)
C07K 1/10 (2006.01) *G01N 33/551* (2006.01)
C07K 1/13 (2006.01) *C07F 9/02* (2006.01)

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(21) International Application Number:

PCT/US2007/070015

(22) International Filing Date: 31 May 2007 (31.05.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/810,185	31 May 2006 (31.05.2006)	US
60/835,569	4 August 2006 (04.08.2006)	US
60/923,644	16 April 2007 (16.04.2007)	US
11/755,699	30 May 2007 (30.05.2007)	US

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, 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, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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Published:

— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
6 November 2008

(54) Title: METHODS AND REAGENTS FOR DETECTING BIOACTIVE LIPIDS

(57) Abstract: Compositions and methods for producing monoclonal antibodies and their derivatives reactive against bioactive lipid targets are described. These compositions include derivatized lipids, each of which comprises a bioactive lipid that having a polar head group and at least one hydrocarbon chain (e.g., a lysolipid such as lysophosphatidic acid or sphingosine-1 -phosphate) in which a carbon atom has been derivatized with a pendant reactive group; immunogens made by linking a derivatized lipid to a carrier moiety (e.g., a carrier protein, polyethylene glycol, colloidal gold, alginate, or a silicone bead); monoclonal antibodies and derivatives produced by immunizing an animal with such an immunogen; and therapeutic and diagnostic compositions containing such antibodies and antibody derivatives. Methods for making such derivatized lipids, immunogens, and monoclonal antibodies and derivatives, methods for detecting such antibodies once generated, and therapeutic and diagnostic methods for using such antibodies and derivatives, are also described.

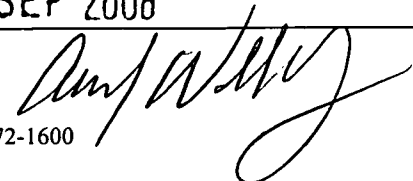


WO 2007/140433 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US07/70015

A. CLASSIFICATION OF SUBJECT MATTER IPC: C07K 1/00(2006.01),1/04(2006.01),1/10(2006.01),1/13(2006.01);G01N 33/551(2006.01);C07F 9/02(2006.01) USPC: 436/524,501;530/359,402,403;554/79 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) U.S. : 436/524,501; 530/359,402,403; 554/79 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) Please See Continuation Sheet																				
C. DOCUMENTS CONSIDERED TO BE RELEVANT																				
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.																		
A	US 6,210,976 (Sabbadini et al) 03 April 2001	1-20																		
A	US 6,967,022 (Livingston et al) 22 November 2005	1-20																		
A	EP 736770 (Roland et al) 09 October 1996.	1-20																		
A	US 6610835 (Liotta et al) 26 August 2003	1-20																		
A	US 6,300,308 (Schroit) 09 October 2001	1-20																		
A	US 6,806,354 (Schroit) 19 October 2004.	1-20																		
☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.																				
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"P" document published prior to the international filing date but later than the priority date claimed																				
Date of the actual completion of the international search 01 September 2008 (01.09.2008)		Date of mailing of the international search report 11 SEP 2008																		
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201		Authorized officer SHAFIQU L HAQ Telephone No. 571-272-1600 																		

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US07/70015

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,061,626 (Baldo et al) 29 October 1991.	1-20

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US07/70015

Continuation of B. FIELDS SEARCHED Item 3:

APS, CAPLUS, EAST, GOOGLE

Search terms: conjugate, hapten, immunogen, sphingolipid, lysophosphatidic, phosphatidyl glycerol, cardiolipin, lysophosphatidyl choline, sphinganine, sphingosine, solid support, solid substrate, antibody, albumin, KHL, ovalbumin, carrier.