2 3 SEP 2003

PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 :
C07K 16/24, C12N 15/13, 15/63, 5/10, C07K 16/00, A61K 39/395, G01N 33/577, C12P 21/08, A61P 43/00

A1

(11) International Publication Number: WO 00/56772

(43) International Publication Date: 28 September 2000 (28.09.00)

(21) International Application Number: PCT/US00/07946

(22) International Filing Date: 24 March 2000 (24.03.00)

(30) Priority Data:
60/126,603 25 March 1999 (25.03.99) US

(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application
US 60/126,603 (CIP)
Filed on 25 March 1999 (25.03.99)

(71) Applicants *(for all designated States except US)*: BASF AKTIENGESELLSCHAFT [DE/DE]; Carl-Bosch Strasse 38, D-67056 Ludwigshafen (DE). GENETICS INSTITUTE INC. [US/US]; 87 CambridgePark Drive, Cambridge, MA 02140 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: SALFELD, Jochen, G. [DE/US]; 177 Old Westborogh Road, North Grafton, MA 01536 (US). ROGUSKA, Michael [US/US]; 16 Hilldale Road, Ashland, MA 01721 (US). PASKIND, Michael [US/US]; 253 Redemption Rock Trail, Sterling, MA 01564 (US). BANERJEE, Subhashis [IN/US]; 25 Hapgood Way, Shrewsbury, MA 01545 (US). TRACEY, Daniel, E. [US/US]; 149 Shaker Road, Harvard, MA 01451 (US). WHITE, Michael [US/US]; 30 Angelica Drive, Framingham, MA 01701 (US). KAYMAKCALAN, Zehra [TR/US]; 4 Picadilly Way, Westborough, MA 01581 (US). LABKOVSKY, Boris [US/US]; 107A-5 Broadmeadow Road, Marlborough, MA 01752 (US). SAKORAFAS, Paul [US/US]; 47 Court Street, Newton, MA 02160 (US). FRIEDRICH, Stuart [CA/US]; 20 Albion Street, Melrose, MA 02176 (US). MYLES, Angela [US/US]; Apartment #7, 11 Crescent Drive, Andover, MA 01810 (US). VELDMAN, Geertruida, M. [NL/US]; 60 Woodmere Drive, Sudbury, MA 01776 (US). VENTURINI, Amy [US/US]; 207 Woburn Street, Lexington, MA 02420 (US). WARNE, Nicholas, W. [US/US]; 27 Farrwood Drive, Andover, MA 01810 (US). WIDOM, Angela [US/US]; 19 Cherokee Road, Acton, MA 01720 (US). ELVIN, John, G. [GB/GB]; 36 Perowne Street, Cambridge CB1 2AY (GB). DUNCAN, Alexander, R. [GB/GB]; 3 Hauwxton Road, Little Shelford, Cambridge CB2 5HJ (GB). DERBYSHIRE, Elaine, J. [GB/GB]; 15 The Brambles, Studlands Rise, Royston, Hertfordshire SG8 9NQ (GB). CARMEN, Sara [GB/GB]; 136 Sturton Street, Cambridge CB1 2QF (GB). SMITH, Stephen [GB/GB]; 33 Church Road, Wicken, Ely, Cambridgeshire CB7 5XT (GB). HOLTET, Thor, Las [DK/GB]; 13 Mortimer Road, Royston, Hertfordshire (GB). DU FOU, Sarah, L. [GB/GB]; 76 Ickleford Road, Hitchen, Hertfordshire SG5 1TL (GB).

(74) Agents: KARA, Catherine, J. et al.; Lahive & Cockfield, LLP, 28 State Street, Boston, MA 02109 (US).

(81) Designated States: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published
With international search report.
Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

162162

G00001

(54) Title: HUMAN ANTIBODIES THAT BIND HUMAN IL-12 AND METHODS FOR PRODUCING

(57) Abstract

Human antibodies, preferably recombinant human antibodies, that specifically bind to human interleukin-12 (hIL-12) are disclosed. Preferred antibodies have high affinity for hIL-12 and neutralize hIL-12 activity *in vitro* and *in vivo*. An antibody of the invention can be a full-length antibody or an antigen-binding portion thereof. The antibodies, or antibody portions, of the inveniton are useful for detecting hIL-12 and for inhibiting hIL-12 activity, e.g., in a human subject suffering from a disorder in which hIL-12 activity is detrimental. Nucleic acids, vectors and host cells for expressing the recombinant human antibodies of the invention, and methods of synthesizing the recombinant human antibodies, are also encompassed by the invention.

2 3 SEP 2003

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece			TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	NZ	New Zealand		
CM	Cameroon			PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		