

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

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
3 January 2002 (03.01.2002)

PCT

(10) International Publication Number  
**WO 02/000724 A3**

- (51) International Patent Classification<sup>7</sup>: C12N 15/12, C07K 14/715, 16/18, A01K 67/027, A61K 38/16, C12N 15/86, 5/10, G01N 33/50
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- (21) International Application Number: PCT/US01/20820
- (22) International Filing Date: 28 June 2001 (28.06.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/214,866 28 June 2000 (28.06.2000) US
- (63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:  
US 60/214,866 (CIP)  
Filed on 28 June 2000 (28.06.2000)
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- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, 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, MZ, 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.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, 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, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— with international search report
- (88) Date of publication of the international search report:  
3 January 2003
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



WO 02/000724 A3

(54) Title: THYMIC STROMAL LYMPHOPOIETIN RECEPTOR MOLECULES AND USES THEREOF

(57) Abstract: The present invention provides Thymic Stromal Lymphopoietin Receptor (TSLPR) polypeptides and nucleic acid molecules encoding the same. The invention also provides selective binding agents, vectors, host cells, and methods for producing TSLPR polypeptides. The invention further provides pharmaceutical compositions and methods for the diagnosis, treatment, amelioration, and/or prevention of diseases, disorders, and conditions associated with TSLPR polypeptides.

INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US 01/20820

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 C12N15/12 C07K14/715 C07K16/18 A01K67/027 A61K38/16  
 C12N15/86 C12N5/10 G01N33/50

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)  
 IPC 7 C07K C12N A01K A61K 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, BIOSIS, SEQUENCE SEARCH, MEDLINE, PAJ, WPI Data, CHEM ABS Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 99 47538 A (HUMAN GENOME SCIENCES INC ;ROSEN CRAIG A (US); MOORE PAUL A (US)); 23 September 1999 (1999-09-23) SEQ ID NO:1, 2. see also GSP AAY31810 and AAX88018.	1-57
X	HIROYAMA TAKASHI ET AL: "Molecular cloning and characterization of CRLM-2, a novel type I cytokine receptor preferentially expressed in hematopoietic cells" BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, ACADEMIC PRESS INC. ORLANDO, FL, US, vol. 272, no. 1, 27 May 2000 (2000-05-27), pages 224-229, XP002194487 ISSN: 0006-291X figure 1	1-57

Further documents are listed in the continuation of box C.  Patent family members are listed in 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  21 August 2002	Date of mailing of the international search report  29/08/2002
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Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2230 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  Schmitz, T
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## INTERNATIONAL SEARCH REPORT

ational Application No  
PCT/US 01/20820

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>FUJIO K ET AL: "MOLECULAR CLONING OF A NOVEL TYPE 1 CYTOKINE RECEPTOR SIMILAR TO THE COMMON GAMMA CHAIN" BLOOD, W.B. SAUNDERS, PHILADELPHIA, VA, US, vol. 95, no. 7, 1 April 2000 (2000-04-01), pages 2204-2211, XP000946169 ISSN: 0006-4971 figure 1</p> <p style="text-align: center;">---</p>	1-57
E	<p>WO 02 00723 A (WHITEHEAD BIOMEDICAL INST ;BAUMANN HEINZ (US); FARR ANDREW G (US);) 3 January 2002 (2002-01-03) identical with present application.</p> <p style="text-align: center;">---</p>	1-57
P,X	<p>PARK LINDA S ET AL: "Cloning of the murine thymic stromal lymphopoietin (TSLP) receptor: Formation of a functional heteromeric complex requires interleukin 7 receptor" JOURNAL OF EXPERIMENTAL MEDICINE, TOKYO, JP, vol. 192, no. 5, 4 September 2000 (2000-09-04), pages 659-669, XP002193895 ISSN: 0022-1007 figure 3</p> <p style="text-align: center;">-----</p>	1-57

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

## Continuation of Box I.1

Although claim 49 is directed to a diagnostic method practised on the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

Although claims 33, 48, 53 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

## Continuation of Box I.2

Claims Nos.: 2, 3, 14, 15, 18-32, 34, 35 (all partially)

Present claims 2, 3, 14, 15 relate to an extremely large number of possible molecules. Support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT is to be found, however, for only a very small proportion of the molecules claimed. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely those parts relating to the full length of the SEQ ID NOs.

Present claims 18-32, 34, 35 relate to an extremely large number of possible selective binding agents. Support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT is to be found, however, for only a very small proportion of the selective binding agents claimed. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely those parts relating to the specific antibody.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 01/20820

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 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:  
see FURTHER INFORMATION sheet PCT/ISA/210
  
2.  Claims Nos.: 2, 3, 14, 15, 18-32, 34, 35 (all partially)  
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:  
see FURTHER INFORMATION sheet PCT/ISA/210
  
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 II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

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 fee, this Authority did not invite payment of any additional fee.
  
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.:

### Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

**INTERNATIONAL SEARCH REPORT**  
 Information on patent family members

International Application No  
 PCT/US 01/20820

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 9947538	A	23-09-1999	AU	3072799 A	11-10-1999
			AU	3451799 A	11-10-1999
			CA	2323761 A1	23-09-1999
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