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*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.*

(54) Title: SECRETED PROTEINS

(57) Abstract: The invention provides human secreted proteins (SECP) and polynucleotides which identify and encode SECP. The invention also provides expression vectors, host cells, antibodies, agonists, and antagonists. The invention also provides methods for diagnosing, treating, or preventing disorders associated with aberrant expression of SECP.

WO 02/038602 A3

# INTERNATIONAL SEARCH REPORT

In ɔnal Application No
PCT/US 01/47420

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C07K14/47

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

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, SEQUENCE SEARCH, BIOSIS, MEDLINE, WPI Data, PAJ, EMBL

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category ° | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---|---|---|
| A | WO 00 09552 A (GENETICS INST)<br>24 February 2000 (2000-02-24)<br><br>the whole document<br>--- | 1-20,23,<br>26-56,<br>119 |
| A | BLOBEL G ET AL: "TRANSLOCATION OF PROTEINS ACROSS MEMBRANES: THE SIGNAL HYPOTHESIS AND BEYOND"<br>SYMPOSIA OF THE SOCIETY FOR EXPERIMENTAL BIOLOGY, COMPANY OF BIOLOGISTS, CAMBRIDGE, GB,<br>1979, pages 9-36, XP001010405<br>ISSN: 0081-1386<br>table 1<br>---<br>-/-- | 1-20,23,<br>26-56,<br>119 |

[X] Further documents are listed in the continuation of box C.

[X] 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 | Date of mailing of the international search report |
|---|---|
| 25 November 2002 | 24.03.03 |

| Name and mailing address of the ISA | Authorized officer |
|---|---|
| European Patent Office, P.B. 5818 Patentlaan 2<br>NL - 2280 HV Rijswijk<br>Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,<br>Fax: (+31-70) 340-3016 | Meyer, W |

Form PCT/ISA/210 (second sheet) (July 1992)

# INTERNATIONAL SEARCH REPORT

tional Application No
PCT/US 01/47420

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category ° | Citation of document, with indication,where appropriate, of the relevant passages | Relevant to claim No. |
|---|---|---|
| A | WO 00 09551 A (GENETICS INST)<br>24 February 2000 (2000-02-24)<br><br>the whole document | 1-20,23,<br>26-56,<br>119 |
| A | WO 99 60020 A (GENETICS INST)<br>25 November 1999 (1999-11-25)<br><br>the whole document | 1-20,23,<br>26-56,<br>119 |
| X | DATABASE EMBL 'Online!<br>20 March 2000 (2000-03-20)<br>BIRREN B., LINTON L., NUSBAUM C., LANDER E.;: "Birren B., Linton L., Nusbaum C., Lander E.;"<br>retrieved from EBI<br>Database accession no. AC025941<br>XP002222262<br>abstract | 1-20,23,<br>26-56,<br>119 |
| P,X | NAGASE T ET AL: "PREDICTION OF THE CODING SEQUENCES OF UNIDENTIFIED HUMAN GENES XXI. THE COMPLETE SEQUENCES OF 60 NEW CDNA CLONES FROM BRAIN WHICH CODE FOR LARGE PROTEINS"<br>DNA RESEARCH, UNIVERSAL ACADEMY PRESS, JP,<br>vol. 8, no. 4,<br>31 August 2001 (2001-08-31), pages 179-187, XP001055485<br>ISSN: 1340-2838<br>abstract | 1-20,23,<br>26-56,<br>119 |
| E | WO 01 90354 A (UNIV LEEDS ;JACKSON ANDREW PETER (GB); MARKHAM ALEXANDER FRED (GB))<br>29 November 2001 (2001-11-29)<br>SEQ ID NO 12 | 1-20,23,<br>26-56,<br>119 |

# INTERNATIONAL SEARCH REPORT

ational application No.
PCT/US 01/47420

**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:

2. ☒ Claims Nos.: 21, 22, 24
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:

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 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.:

56, 119 and partially 1-20, 23, 26-55

**Remark on Protest**

☐ The additional search fees were accompanied by the applicant's protest.

☐ 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: 56, 119 and partially 1-20,23,26-55

   Relating to SEQ ID NO 1 and 64 (SECP1) and the use thereof

2. Claims: 57, 120 and partially 1-20,23,26-55

   Provision of SECP2 and the use therof

3. Claims: inventions 3-64

   Provision of the other SECPx (SEP3-64) and the use therof

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 21, 22, 24

Present claims 1 (c), 1 (d), 12 (c) (d) relate to an extremely large number of variations. In fact, the claims contains so many options that a lack of clarity (and/or conciseness) within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT arises .
However, support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT is found only for a small proportion of the claimed subject-matter.
Consequently, the search has been carried out for those parts of the claims which appear to be support and disclosed, namely those parts relating to sequences with the SEQ ID NO. 1 and 64.

Present claims 3, 6, 7, 8 relate to an extremely large number of possible compounds, due to the degeneracy of the genetic code there is very large numbers of polynucleotide that encode given polypeptide such that of the present application. 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 compounds 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 compounds identified by the corresponding SEQ ID NOs (i.e. to a polypeptide encoded by SEQ ID NO 1 and to a polynucleotide encoded by SEQ ID NO 64).

Claim 21, 22, 24 refer to an agonist of the polypeptide of claim 1 without giving a true technical characterization. Moreover, no such specific compounds are defined in the application. In consequence, the scope of said claims are ambiguous and vague, and its subject-matter is not sufficiently disclose and supported (Art. 5 and Art. 6 PCT). No search can be carried our for such purely speculative claims which wording is, in fact, a mere recitation of the result to be achieved.

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

Information on patent family members

In ional Application No
PCT/US 01/47420

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
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