

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
13 June 2002 (13.06.2002)

PCT

(10) International Publication Number
WO 02/046409 A3(51) International Patent Classification⁷: **C12N 15/12**,
C07K 14/47, 16/18, C12Q 1/68, G01N 33/53, 33/50,
33/68, A61K 38/17, 48/00, 39/395

(21) International Application Number: PCT/US01/46586

(22) International Filing Date: 6 December 2001 (06.12.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/251,660	6 December 2000 (06.12.2000)	US
60/255,029	12 December 2000 (12.12.2000)	US
60/260,326	8 January 2001 (08.01.2001)	US
60/263,800	24 January 2001 (24.01.2001)	US
60/269,942	20 February 2001 (20.02.2001)	US
60/286,183	24 April 2001 (24.04.2001)	US
60/313,627	20 August 2001 (20.08.2001)	US
60/318,712	12 September 2001 (12.09.2001)	US

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier applications:

US	60/251,660 (CIP)
Filed on	6 December 2000 (06.12.2000)
US	60/255,029 (CIP)
Filed on	12 December 2000 (12.12.2000)
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Filed on	20 August 2001 (20.08.2001)
US	60/318,712 (CIP)
Filed on	12 September 2001 (12.09.2001)

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[Continued on next page]

(54) Title: PROTEINS AND NUCLEIC ACIDS ENCODING SAME

(57) Abstract: Disclosed are polypeptides and nucleic acids encoding same. Also disclosed are vectors, host cells, antibodies and recombinant methods for producing the polypeptides and polynucleotides, as well as methods for using same.



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GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent
(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG).

(88) Date of publication of the international search report:
10 July 2003

Published:

— with international search report

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.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 01/46586

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/12 C07K14/47 C07K16/18 C12Q1/68 G01N33/53
G01N33/50 G01N33/68 A61K38/17 A61K48/00 A61K39/395

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 C12Q G01N A61K

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, EMBL, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE EMBL 'Online! 29 September 2000 (2000-09-29) retrieved from EBI Database accession no. AK023308 XP002221101 cited in the application 100.000% identity in 1853 nt overlap (287-2139:519-2371) to Seq.Id.No.1 abstract</p> <p>---</p>	1-41
X	<p>DATABASE GENBANK 'Online! XP002221102 17 human cDNAs encoding processing alpha-mannosidase-like proteins publicly available before 06.12.2000 abstract</p> <p>---</p> <p>-/--</p>	1-41

☒ 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

15 November 2002

Date of mailing of the international search report

13.03.03

Name and mailing address of the ISA

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Petri, B

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/46586

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	EP 1 074 617 A (HELIX RES INST) 7 February 2001 (2001-02-07) Human protein sequence SEQ ID NO:15260; 100.000% identity in 617 aa overlap (73-689:1-617) to Seq.Id.No.2 the whole document	1-41
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 01/46586

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:

Although claims 23-28, 40-41 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.
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 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.:

1-41 (all partially)

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:

Invention 1: claims 1-41 (all partially)

An isolated polypeptide comprising an amino acid sequence selected from the group consisting of SEQ ID NO: 2, products and uses relating to it.

Invention 2-19: claims 1-41 (all partially)

as Invention 1 however relating to SEQ ID NOS 4, 6, 8, ... , 50, 52, respectively.

INTERNATIONAL SEARCH REPORT

Information on patent family members

In International Application No

PCT/US 01/46586

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Information on patent family members

International Application No

PCT/US 01/46586

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