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(71) Applicant (for all designated States except US): **GENET-ICS INSTITUTE, LLC** [US/US]; 87 CambridgePark Drive, Cambridge, MA 02140 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **BOWMAN, Michael, R.** [US/US]; 63 Gloucester Road, Westwood, MA (US).

(74) Agents: **MANDRAGOURAS, Amy, E.** et al.; Lahive & Cockfield, LLP, 28 State Street, Boston, MA 02109 (US).

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- with international search report
- with (an) indication(s) in relation to deposited biological material furnished under Rule 13bis separately from the description

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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: NOVEL EBI-3-ALT PROTEIN AND NUCLEIC ACID MOLECULES AND USES THEREFOR

(57) Abstract: Novel EBI-3-alt polypeptides, proteins, and nucleic acid molecules are disclosed. In addition to isolated, full-length EBI-3-alt proteins, the invention further provides isolated EBI-3-alt fusion proteins, antigenic peptides and anti-EBI-3-alt antibodies. The invention also provides EBI-3-alt nucleic acid molecules, recombinant expression vectors containing a nucleic acid molecule of the invention, host cells into which the expression vectors have been introduced and non-human transgenic animals in which an EBI-3-alt gene has been introduced or disrupted. Diagnostic, screening and therapeutic methods utilizing compositions of the invention are also provided.



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INTERNATIONAL SEARCH REPORT

Internat. Application No

PCT/US 01/24265

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/12 C07K14/52 C07K14/715 C07K16/28 G01N33/68
C12Q1/68

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 C12N 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)

MEDLINE, BIOSIS, PAJ, WPI Data, EPO-Internal, SEQUENCE SEARCH, CHEM ABS Data, EMBASE, EMBL

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DEVERGENE ODILE ET AL: "A novel interleukin-12 p40-related protein induced by latent Epstein-Barr virus infection in B lymphocytes." JOURNAL OF VIROLOGY, vol. 70, no. 2, 1996, pages 1143-1153, XP002201684 ISSN: 0022-538X cited in the application the whole document	1-23
X	US 5 744 301 A (KIEFF ELLIOTT ET AL) 28 April 1998 (1998-04-28) SEQ ID NO: 5, SEQ ID NO: 6 claims; examples 6-12 --- -/--	1-23

☒ 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

16 July 2002

Date of mailing of the international search report

02. 08. 2002

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Madruga, J

INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 830 451 A (DEVERGNE ODILE ET AL) 3 November 1998 (1998-11-03) SEQ ID NO: 1, SEQ ID NO: 2 ---	1-23
X	WO 97 13859 A (BRIGHAM & WOMENS HOSPITAL) 17 April 1997 (1997-04-17) page 25, line 9 -page 32; claims ---	1-23
X	DATABASE TREMBL [Online] 1 November 1998 (1998-11-01) Database accession no. 075269 XP002201685 cited in the application abstract ---	1-23
P,X	WO 00 55174 A (HUMAN GENOME SCIENCES INC ;ROSEN CRAIG A (US); RUBEN STEVEN M (US)) 21 September 2000 (2000-09-21) SEQ ID NO: 983 ---	1-23
A	EP 0 894 854 A (SMITHKLINE BEECHAM CORP) 3 February 1999 (1999-02-03) the whole document -----	1-23

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 01/24265

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.: -
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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Present claims 13, 15 and 21 relate to a product defined by reference to a desirable characteristic or property, namely its ability to bind to a polypeptide.

Present claim 18 relates to a product defined by reference to a desirable characteristic or property, namely its ability to hybridize to a nucleic acid molecule.

The claims cover all products having this characteristic or property, whereas the application provides support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT for only a very limited number of such products. 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. Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the product by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible. Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to an antibody (for claims 13, 15 and 21), and those parts relating to a nucleic acid probe or a primer (for claim 18).

Claims 1, 2, 8, 9 and 12 refer to SEQ ID NO: 3 as a nucleic acid sequence, while it is in fact an amino acid sequence. Said claims also refer to a DNA insert of a plasmid deposited with ATCC, but no accession number is given. Therefore, due to reasons of inconsistency and obscurity, those parts of claims 1, 2, 8, 9 and 12 referring to SEQ ID NO: 3 and to the DNA insert of a plasmid deposited with ATCC were not searched.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/24265

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