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

US	60/166,336 (CIP)
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Previous Correction:

see PCT Gazette No. 40/2001 of 4 October 2001, Section II

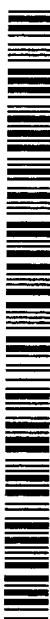
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: POLYPEPTIDES AND NUCLEIC ACIDS ENCODING SAME

(57) Abstract: The present invention provides novel isolated NOVX polynucleotides and polypeptides encoded by the NOVX polynucleotides. Also provided are the antibodies that immunospecifically bind to a NOVX polypeptide or any derivative, variant, mutant or fragment of the NOVX polypeptide, polynucleotide or antibody. The invention additionally provides methods in which the NOVX polypeptide, polynucleotide and antibody are utilized in the detection and treatment of a broad range of pathological states, as well as to other uses.



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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/31543

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/12 C07K14/47 G01N33/53 C12Q1/68 A61K38/17
 A61K31/70 A61K39/395 A01K67/027

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 G01N C12Q 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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE EMBL [Online] Entry/Acc.no. AI613267, 26 April 1999 (1999-04-26) STRAUSBERG, R.: "ty35d07.x1 NCI CGAP Ut2 Homo sapiens cDNA clone IMAGE:2281069 3', mRNA sequence." XP002174078 the whole document ---	1-14,19
A	IKEGAWA SHIRO ET AL: "Structure and chromosomal assignment of the human S1-5 gene (FBN1) that is highly homologous to fibrillin" GENOMICS, ACADEMIC PRESS, SAN DIEGO, US, vol. 35, no. 3, 1996, pages 590-592, XP002155261 ISSN: 0888-7543 the whole document --- -/--	



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

7 August 2001

Date of mailing of the international search report

27. 11. 01

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/31543

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 98 04688 A (BECHTOLD ROLF ;BIOPHARM GMBH (DE); POHL JENS (DE); UNSICKER KLAUS) 5 February 1998 (1998-02-05) ---	
A	WO 95 18823 A (BETH ISRAEL HOSPITAL) 13 July 1995 (1995-07-13) ---	
P,X	NAGASE T ET AL: "PREDICTION OF THE CODING SEQUENCES OF UNIDENTIFIED HUMAN GENES.17. THE COMPLETE SEQUENCES OF 100 NEW CDNA CLONES FROM BRAIN WHICH CODEFOR LARGE PROTEINS IN VITRO" DNA RESEARCH,UNIVERSAL ACADEMY PRESS,JP, vol. 7, 2000, pages 143-150, XP000943428 ISSN: 1340-2838 * see KIAA1482 * -----	5-7, 10-14, 19,30,33

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 00/31543

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, 42-43, and claim 22 in as far as it pertains to in vivo use, 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.:

1-43 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:

1. Claims: 1-43, all partially

NOV1 polypeptide and variants thereof as illustrated by seq.ID.2, nucleic acids encoding them and fragments thereof, vector comprising said nucleic acid, cell comprising said vector, antibody against said polypeptide, use of the antibody or the nucleic acid in a detection assay for said protein resp. encoding nucleic acid, method for diagnosing a disorder associated with altered levels of said polypeptide resp. nucleic acid, method for identifying an agent which binds to said polypeptide, and pharmaceutical compositions of said polypeptide, nucleic acid, antibody or binding agent.

2. Claims: 1-43, all partially

NOV2 polypeptide and variants thereof as illustrated by seq.ID.4, nucleic acids encoding them and fragments thereof, vector comprising said nucleic acid, cell comprising said vector, antibody against said polypeptide, use of the antibody or the nucleic acid in a detection assay for said protein resp. encoding nucleic acid, method for diagnosing a disorder associated with altered levels of said polypeptide resp. nucleic acid, method for identifying an agent which binds to said polypeptide, and pharmaceutical compositions of said polypeptide, nucleic acid, antibody or binding agent.

3. Claims: 1-43, all partially

NOV3 polypeptide and variants thereof as illustrated by seq.ID.6, nucleic acids encoding them and fragments thereof, vector comprising said nucleic acid, cell comprising said vector, antibody against said polypeptide, use of the antibody or the nucleic acid in a detection assay for said protein resp. encoding nucleic acid, method for diagnosing a disorder associated with altered levels of said polypeptide resp. nucleic acid, method for identifying an agent which binds to said polypeptide, and pharmaceutical compositions of said polypeptide, nucleic acid, antibody or binding agent.

4. Claims: 1-43, all partially

NOV4 polypeptide and variants thereof as illustrated by seq.ID.8, nucleic acids encoding them and fragments thereof, vector comprising said nucleic acid, cell comprising said vector, antibody against said polypeptide, use of the antibody or the nucleic acid in a detection assay for said protein resp. encoding nucleic acid, method for diagnosing a disorder associated with altered levels of said polypeptide resp. nucleic acid, method for identifying an agent which

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

binds to said polypeptide, and pharmaceutical compositions of said polypeptide, nucleic acid, antibody or binding agent.

5. Claims: 1-43, all partially

NOV5 polypeptide and variants thereof as illustrated by seq.ID.10, nucleic acids encoding them and fragments thereof, vector comprising said nucleic acid, cell comprising said vector, antibody against said polypeptide, use of the antibody or the nucleic acid in a detection assay for said protein resp. encoding nucleic acid, method for diagnosing a disorder associated with altered levels of said polypeptide resp. nucleic acid, method for identifying an agent wich binds to said polypeptide, and pharmaceutical compositions of said polypeptide, nucleic acid, antibody or binding agent.

6. Claims: 1-43, all partially

NOV6 polypeptide and variants thereof as illustrated by seq.ID.12, nucleic acids encoding them and fragments thereof, vector comprising said nucleic acid, cell comprising said vector, antibody against said polypeptide, use of the antibody or the nucleic acid in a detection assay for said protein resp. encoding nucleic acid, method for diagnosing a disorder associated with altered levels of said polypeptide resp. nucleic acid, method for identifying an agent wich binds to said polypeptide, and pharmaceutical compositions of said polypeptide, nucleic acid, antibody or binding agent.

7. Claims: 1-43, all partially

NOV7 polypeptide and variants thereof as illustrated by seq.ID.14, nucleic acids encoding them and fragments thereof, vector comprising said nucleic acid, cell comprising said vector, antibody against said polypeptide, use of the antibody or the nucleic acid in a detection assay for said protein resp. encoding nucleic acid, method for diagnosing a disorder associated with altered levels of said polypeptide resp. nucleic acid, method for identifying an agent wich binds to said polypeptide, and pharmaceutical compositions of said polypeptide, nucleic acid, antibody or binding agent.

8. Claims: 1-43, all partially

NOV8 polypeptide and variants thereof as illustrated by seq.ID.16, nucleic acids encoding them and fragments thereof, vector comprising said nucleic acid, cell comprising said vector, antibody against said polypeptide,

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

use of the antibody or the nucleic acid in a detection assay for said protein resp. encoding nucleic acid, method for diagnosing a disorder associated with altered levels of said polypeptide resp. nucleic acid, method for identifying an agent wich binds to said polypeptide, and pharmaceutical compositions of said polypeptide, nucleic acid, antibody or binding agent.

9. Claims: 1-43, all partially

NOV9 polypeptide and variants thereof as illustrated by seq.ID.18, nucleic acids encoding them and fragments thereof, vector comprising said nucleic acid, cell comprising said vector, antibody against said polypeptide, use of the antibody or the nucleic acid in a detection assay for said protein resp. encoding nucleic acid, method for diagnosing a disorder associated with altered levels of said polypeptide resp. nucleic acid, method for identifying an agent wich binds to said polypeptide, and pharmaceutical compositions of said polypeptide, nucleic acid, antibody or binding agent.

10. Claims: 1-43, all partially

NOV10 polypeptide and variants thereof as illustrated by seq.ID.20, nucleic acids encoding them and fragments thereof, vector comprising said nucleic acid, cell comprising said vector, antibody against said polypeptide, use of the antibody or the nucleic acid in a detection assay for said protein resp. encoding nucleic acid, method for diagnosing a disorder associated with altered levels of said polypeptide resp. nucleic acid, method for identifying an agent wich binds to said polypeptide, and pharmaceutical compositions of said polypeptide, nucleic acid, antibody or binding agent.

11. Claims: 1-43, all partially

NOV11 polypeptide and variants thereof as illustrated by seq.ID.22, nucleic acids encoding them and fragments thereof, vector comprising said nucleic acid, cell comprising said vector, antibody against said polypeptide, use of the antibody or the nucleic acid in a detection assay for said protein resp. encoding nucleic acid, method for diagnosing a disorder associated with altered levels of said polypeptide resp. nucleic acid, method for identifying an agent wich binds to said polypeptide, and pharmaceutical compositions of said polypeptide, nucleic acid, antibody or binding agent.

12. Claims: 1-43, all partially

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

NOV12 polypeptide and variants thereof as illustrated by seq.ID.24, nucleic acids encoding them and fragments thereof, vector comprising said nucleic acid, cell comprising said vector, antibody against said polypeptide, use of the antibody or the nucleic acid in a detection assay for said protein resp. encoding nucleic acid, method for diagnosing a disorder associated with altered levels of said polypeptide resp. nucleic acid, method for identifying an agent wich binds to said polypeptide, and pharmaceutical compositions of said polypeptide, nucleic acid, antibody or binding agent.

13. Claims: 1-43, all partially

NOV13 polypeptide and variants thereof as illustrated by seq.ID.26, nucleic acids encoding them and fragments thereof, vector comprising said nucleic acid, cell comprising said vector, antibody against said polypeptide, use of the antibody or the nucleic acid in a detection assay for said protein resp. encoding nucleic acid, method for diagnosing a disorder associated with altered levels of said polypeptide resp. nucleic acid, method for identifying an agent wich binds to said polypeptide, and pharmaceutical compositions of said polypeptide, nucleic acid, antibody or binding agent.

14. Claims: 1-43, all partially

NOV14 polypeptide and variants thereof as illustrated by seq.ID.28, nucleic acids encoding them and fragments thereof, vector comprising said nucleic acid, cell comprising said vector, antibody against said polypeptide, use of the antibody or the nucleic acid in a detection assay for said protein resp. encoding nucleic acid, method for diagnosing a disorder associated with altered levels of said polypeptide resp. nucleic acid, method for identifying an agent wich binds to said polypeptide, and pharmaceutical compositions of said polypeptide, nucleic acid, antibody or binding agent.

15. Claims: 1-43, all partially

NOV15 polypeptide and variants thereof as illustrated by seq.ID.30, nucleic acids encoding them and fragments thereof, vector comprising said nucleic acid, cell comprising said vector, antibody against said polypeptide, use of the antibody or the nucleic acid in a detection assay for said protein resp. encoding nucleic acid, method for diagnosing a disorder associated with altered levels of said polypeptide resp. nucleic acid, method for identifying an agent wich binds to said polypeptide, and pharmaceutical

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

compositions of said polypeptide, nucleic acid, antibody or binding agent.

16. Claims: 1-43, all partially

NOV16 polypeptide and variants thereof as illustrated by seq.ID.32, nucleic acids encoding them and fragments thereof, vector comprising said nucleic acid, cell comprising said vector, antibody against said polypeptide, use of the antibody or the nucleic acid in a detection assay for said protein resp. encoding nucleic acid, method for diagnosing a disorder associated with altered levels of said polypeptide resp. nucleic acid, method for identifying an agent wich binds to said polypeptide, and pharmaceutical compositions of said polypeptide, nucleic acid, antibody or binding agent.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PL /US 00/31543

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9804688	A	05-02-1998	AU 4202897 A	20-02-1998
			WO 9804688 A1	05-02-1998
			EP 0922101 A1	16-06-1999
			JP 2000516457 T	12-12-2000

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			WO 9518823 A2	13-07-1995
			US 6004757 A	21-12-1999
