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18 February 2000 (18.02.2000) US  
60/187,202 3 March 2000 (03.03.2000) US  
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[Continued on next page]

(54) Title: COMPOSITIONS AND METHODS FOR THE TREATMENT OF IMMUNE RELATED DISEASES

MKPTLCFLFILVSLFPLIVPGNAQCSFESLVDQRIKEALSRQEPKTISCTSVTSSGRLASCPAGMVVTG  
CACGYGCGSWDIRNGNTCHCQCSVMDWASARCCRMA

Signal sequence

1-20

Transmembrane domain  
none

N-myristoylation site.

21-26  
64-69  
69-74

Prenyl group binding site (CAAX box).

102-106

(57) Abstract: The present invention relates to compositions containing novel proteins and methods of using those compositions for the diagnosis and treatment of immune related diseases.

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

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INTERNATIONAL SEARCH REPORT

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PL./US 00/30873

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C12N15/12 C07K14/47 C12N15/62 C07K16/18 A61K38/17  
A61K39/395 G01N33/53 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 A61K G01N C12Q

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,L	WO 99 55868 A (GENENTECH INC ;GURNEY AUSTIN L (US); HEBERT CAROLINE (US); KABAKOF) 4 November 1999 (1999-11-04) see passages relating to FIZZ2 L: priority	1-34
X	WO 98 58061 A (SCHERING CORP) 23 December 1998 (1998-12-23) seq.ID's 5 and 6 table 2	1-17,20, 24,27-30
A	WO 98 24908 A (HUMAN GENOME SCIENCES INC ;SEIBEL GEORGE (US); LI HAODONG (US)) 11 June 1998 (1998-06-11) 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	"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
"E" earlier document but published on or after the international filing date	"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
"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)	"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.
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search <b>15 August 2001</b>	Date of mailing of the international search report <b>27. 11. 01</b>
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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 <b>Smalt, R</b>
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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/30873

## 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 11138 A (HUMAN GENOME SCIENCES INC ;ZENG ZHI ZHEN (US); OLSEN HENRIK S (US)) 19 March 1998 (1998-03-19) the whole document ---	
A	WO 98 01541 A (TULARIK INC) 15 January 1998 (1998-01-15) the whole document ---	
A	WO 96 27603 A (MILLENNIUM PHARM INC) 12 September 1996 (1996-09-12) the whole document ---	
T	STEPPAN CLAIRE M ET AL: "A family of tissue-specific resistin-like molecules." PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES, vol. 98, no. 2, 16 January 2001 (2001-01-16), pages 502-506, XP002175007 January 16, 2001 ISSN: 0027-8424 the whole document -----	

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 00/30873

## 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 22, 23 and claims 31-36 in as far as they pertain 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:  

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.:

claims 1-32 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 1-32, all partially

Polypeptide having at least 80% homology to seq.ID.2, designated PRO1081, or the extracellular domain thereof, nucleic acid with at least 80% identity to seq.ID.1, vector comprising said nucleic acid, host cells containing said vector, and method for producing said polypeptides using said host. Chimeric proteins comprising said polypeptide, antibody directed against said polypeptide, composition comprising said polypeptide or said antibody, article of manufacture comprising said composition, methods for diagnosis through determination of the concentration of the polypeptides or the expression level thereof, methods for identifying (ant)agonists of said polypeptide, or compounds with alter the expression of said nucleic acid.

Inventions 2-9: claims 1-36,  
all partially and as far as applicable

Subject matter as defined for invention 1, but relating to the respective polypeptides:

2. PRO1274,
3. PRO1199,
4. PRO1754,
5. PRO1556,
6. PRO4401,
7. PRO9912,
8. PRO10268, and
9. PRO10272.

Where applicable, the use of said polypeptides for stimulating or inhibiting the proliferation of T-lymphocytes and/or stimulating the infiltration of inflammatory cells into a tissue of a mammal form also part of the respective inventions.

For the sake of conciseness, the first subject matter is explicitly defined, the other subject matters are defined by analogy thereto.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Present claims 16-23 and 31-36 relate to a product defined by reference to a desirable characteristic or property, namely it being an (ant)agonist for the polypeptide(s) of claim 10.

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 compounds. 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 antibodies specific for said polypeptide(s) and antisense nucleic acid molecules complementary to the nucleic acid(s) encoding said polypeptide(s) according to claim 1.

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

International Application No

PCT/US 00/30873

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