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(54) Title: ISOLATED HUMAN SECRETED PROTEINS, NUCLEIC ACID MOLECULES ENCODING HUMAN SECRETED PROTEINS, AND USES THEREOF

(57) Abstract: The present invention provides amino acid sequences of peptides that are encoded by genes within the human genome, the secreted peptides of the present invention. The present invention specifically provides isolated peptide and nucleic acid molecules, methods of identifying orthologs and paralogs of the secreted peptides, and methods of identifying modulators of the secreted peptides.

INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US02/10716

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC(7) : C12N 15/11, 15/63; C07N 21/04; C12Q 1/63; A01K 67/00  
 US CL : 536/23.1, 23.5; 435/6, 320.1; 800/8  
 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)  
 U.S. : 536/23.1, 23.5; 435/6, 320.1; 800/8

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 practicable, search terms used)  
 Please See Continuation Sheet

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ZHOU et al. Nodal is a novel TGF-beta-like gene expressed in the mouse node during gastrulation. Nature. February 1993, Vol. 361 No. 6412, pages 543-547, see entire document and attached sequence alignment.	2,3,5,8,9
X --- Y	US 5,965,403 (CELESTE et al.) 12 October 1999 (12.10.1999), see entire document and attached sequence alignment.	1-5,8-16,19-23 ----- 6,7
X --- Y	WO 99/09198 A1 (HUMAN GENOME SCIENCES, INC.) 25 February 1999 (25.02.1999), see entire document and attached sequence alignment.	1-5,8-16,19-23 ----- 6,7
P,X --- P,Y	US 6,024,047 B1 (LEE et al.) 20 March 2001 (20.03.2001), see entire document and the attached sequence alignment.	2,3,5,8-16,19-23 ----- 6,7

Further documents are listed in the continuation of Box C.  See patent family annex.

* Special categories of cited documents:	"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
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
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"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	

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## INTERNATIONAL SEARCH REPORT

C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	WO 98/12322 A1 (GENETICS INSTITUTE, INC.) 26 March 1998 (26.03.1998), see entire document and the attached sequence alignment.	1-5,8-16,19-23 ----- 6,7
X --- Y	WO 99/06427 A1 (MILLENNIUM BIOTHERAPEUTICS, INC.) 11 February 1999 (11.02.1999), see entire document and the attached sequence alignment.	1-5,8-16,19-23 ----- 6,7

**INTERNATIONAL SEARCH REPORT**

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**Continuation of B. FIELDS SEARCHED Item 3:**

STN (MEDLINE, BIOSIS, CAPLUS), EAST SEARCH TERMS: BONE MORPHOGENETIC PROTEIN 16 OR BMP-16  
COMMERCIAL AND ISSUED PATENT SEQUENCE DATABASES FOR SEQ ID NO:1-3