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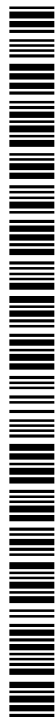


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*For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
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(54) Title: TGF- $\beta$ (A) POLYPEPTIDES, FUNCTIONAL FRAGMENTS AND METHODS OF USE THEREFOR

(57) Abstract: Disclosed are TGF- $\alpha$  polypeptides, related polypeptides, fragments and mimetics thereof useful in stimulating stem cell or precursor cell proliferation, migration and differentiation. The methods of the invention are useful to treat tissue injury as well as expand stem cell populations in, or obtained from, gastrointestinal, musculoskeletal, urogenital, neurological and cardiovascular tissues. The methods include ex-vivo and in vivo applications.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/26023

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : A61K 38/00, 38/19  
 US CL : 514/12, 866

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. : 514/12, 866

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	US 5,885,956 A (NARDI et al) 23 March 1999 (23.03.1999), column 4, lines 10-65.	1,3-5,9-11,15-16
A		2,6-8,12-14

Further documents are listed in the continuation of Box C.

See patent family 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 application or patent 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
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"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 16 September 2004 (16.09.2004)	Date of mailing of the international search report <b>01 OCT 2004</b>
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230	Authorized officer Stephen Guckey  Telephone No. 703-308-0196
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INTERNATIONAL SEARCH REPORT

PCT/US02/26023

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

MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, LIFESCI, CONFSCI, USPATALL, WPIDS

search terms: diabetes, transforming growth, pancreas, insulin, vaccinia, amphiregulin, betacellulin, heparin, EGF, epiregulin, HUS 19878, myxomavirus, Shope, schwannoma, pegylated