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2 August 2007

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(54) Title: OLIGORIBONUCLEOTIDES AND METHODS OF USE THEREOF FOR TREATMENT OF FIBROTIC CONDITIONS AND OTHER DISEASES

(57) Abstract: The invention relates to a double-stranded compound, preferably an oligoribonucleotide, which down-regulates the expression of a gene of the TGase family at post-transcriptional level. The invention also relates to a pharmaceutical composition comprising the compound, or a vector capable of expressing the oligoribonucleotide, and a pharmaceutically acceptable carrier. The present invention also contemplates a method of treating a patient suffering from fibrotic disease such as kidney and liver fibrosis and ocular scarring comprising administering to the patient the pharmaceutical composition in a therapeutically effective amount so as to thereby treat the patient. The invention also relates to treatment of fibrotic and other diseases by use of antibodies to TGase polypeptides.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL06/00671

A. CLASSIFICATION OF SUBJECT MATTER
 IPC(8): C07H 21/04(2006.01);A61K 31/70(2006.01),49/04(2006.01);A01N 43/04(2006.01);C12P 21/06(2006.01)
 C12Q 1/68(2006.01)

USPC: 536/23.1,24.5;514/44;435/6,68.1;424/9.34
 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, 24.5; 514/44; 435/6, 68.1; 424/9.34

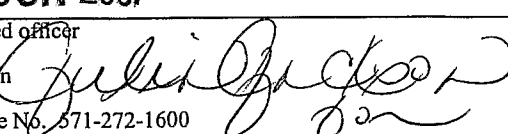
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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	Jolanta M. Wodzinska, Transglutaminases as targets for pharmacological inhibition, Mini-Reviews in Medicinal Chemistry, 2005, Vol 5, pages 279-292	22
X	US 2004/0109845 A1 (TERKELTAUB) 10 June 2004 (10.06.2004), paragraphs 0013 and 0060-0073.	22
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Y	WO 2004/112565 A2 (MOR et al) 29 December 2004 (29.12.2004), pages 17-19.	1-22
X	US 2004/0109845. A1 (TERKELTAUB) 10 June 2004 (10.06.2004), paragraphs 0013 and 0060-0073.	22
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Y	US 2004/0161777 A1 (BAKER et al) 19 August 2004 (19.08.2004), paragraphs 0032-0058.	1-22

<input type="checkbox"/> Further documents are listed in the continuation of Box C.	<input type="checkbox"/> 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
"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	
"P" document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

Date of the actual completion of the international search 22 May 2007 (22.05.2007)	Date of mailing of the international search report 08 JUN 2007
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. (571) 273-3201	Authorized officer Dana Shin  Telephone No. 571-272-1600

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL06/00671

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 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.: 24-28
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:
Claims 24-28 are written as depending from claim 23, which does not exist in the instant case. Therefore, a person of ordinary skill in the art cannot determine what is claimed in claims 24-28.

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 No. III Observations where unity of invention is lacking (Continuation of item 3 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 additional fees, this Authority did not invite payment of any additional fees.
 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 and, where applicable, the payment of a protest fee.
 - The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
 - No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IL06/00671

Continuation of B. FIELDS SEARCHED Item 3:
Medline, CA, Biosis, Embase, Scisearch, EAST
Search terms: TGase, transglutamine, siRNA, polypeptide, antibody, fibrosis