METHOD TO TREAT FLAVIVIRUS INFECTION WITH SiRNA

Abstract: The present invention is directed to methods of treating flavivirus mediated diseases using siRNAs. The invention is based upon our findings in a mouse model that siRNAs directed against sequences conserved among multiple flaviviruses prevents and treats flavivirus infections. Accordingly, the present invention provides an isolated siRNA comprising a sense RNA and an antisense RNA strand or a single strand. The sense and the antisense RNA strands, or the single RNA strand, form an RNA duplex, and wherein the RNA strand comprises a nucleotide sequence identical to a target sequence of about 15 to about 30 contiguous nucleotides in flavivirus mRNA or mutant or variant thereof.
Declaration under Rule 4.17:
— of inventorship (Rule 4.17(iv))

Published:
— with international search report

— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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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.
INTERNATIONAL SEARCH REPORT

A  CLASSIFICATION OF SUBJECT MATTER
IPC(8)-: A61 K 48/00 (2007.01)
USPC- 514/44; 435/5
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)
USPC- 514/44, 435/5

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)
PubWEST (USPT, PGPB, EPAB, JPAB),
Search terms: flavivirus, siRNA, hepatitis C virus, genomic

C  DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>US 2004/0298931 A1 (McSwiggen et al) 21 October 2004 (21 10 2004), abstract, para [0018], [0019], [0029], [0270], [0292], [0297]-[0299], [0301], [0302], [0312], [0316], [0317], [0348] and [0349]</td>
<td>1-43</td>
</tr>
<tr>
<td>Y</td>
<td>US 6,812,219 B2 (LaCoHa et al) 02 November 2004 (02 11 2004), claims 1 and 19</td>
<td>4</td>
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</table>

D  Further documents are listed in the continuation of Box C

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Date of the actual completion of the international search: 01 May 2007 (01 05 2007)
Date of mailing of the international search report: 3 JUL 2007

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