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(54) Title: ANTISENSE ANTIVIRAL COMPOUND AND METHOD FOR TREATING ARENAVIRUS INFECTION

(57) Abstract: The invention provides antisense antiviral compounds and methods of their use and production in inhibition of growth of viruses of the Arenaviridae family and in the treatment of a viral infection. The compounds are particularly useful in the treatment of *Arenavirus* infection in a mammal. The antisense antiviral compounds are substantially uncharged morpholino oligonucleotides have a sequence of 12-40 subunits, including at least 12 subunits having a targeting sequence that is complementary to a region associated with viral RNA sequences within a 19 nucleotide region of the 5'-terminal regions of the viral RNA, viral complementary RNA and/or mRNA identified by SEQ ID NO:1.



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INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER
 IPC(8): C12Q 1/68(2006.01);A01N 43/04(2006.01);C07H 21/04(2006.01);A61K 31/07(2006.01)

 USPC: 435/6,91.1,325,375;514/44;536/23.1,24.3,24.33,24.5
 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)
 U.S. : 435/6, 91.1, 325, 375; 514/44; 536/23.1, 24.3, 24.33, 24.5

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)
 STN file Registry search of SEQ ID NO:1 and SEQ ID NO:2

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| A | PHILLIPS, MI. Antisense Therapeutics: A Promise Waiting to be Fulfilled. Methods in Molecular Medicine, 2005 Vol. 106, pages 3-10, see particularly page 7, last paragraph. | 1-17 |
| A | AGRAWAL et al. Antisense therapeutics: is it as simple as complementary base recognition? Molecular Medicine Today, 2000 Vol. 6, pages 72-81, see particularly page 378 and 379. | 1-17 |
| A | SCHIAVONE et al. Antisense oligonucleotide drug design. Current Pharmaceutical Design, 2004 Vol. 20, pages 769-784, see particularly the Abstract. | 1-17 |


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

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