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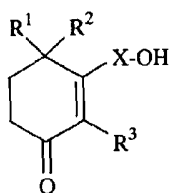
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



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(54) Title: STEM CELL DIFFERENTIATION-INDUCING PROMOTER



(1)

(57) Abstract: Provided is a stem-cell differentiation and induction promoter, which comprises as an effective ingredient a cyclohexenone long-chain alcoholic derivative represented by the formula (1): [wherein, R¹, R² and R³ each independently represents a hydrogen atom or a methyl group and X represents a linear or branched C10-28 alkylene or alkenylene group]. Since the cyclohexenone long-chain alcoholic derivative according to the present invention promotes differentiation-induction of stem cells into cells expressing a specific biological function, a medicament comprising the derivative is useful as a preventive or remedial drug for diseases such as nervous diseases, bone diseases, circulatory diseases and myopathy, caused by the degeneration of tissues or cells or cell death.

INTERNATIONAL SEARCH REPORT

International Application No

JP 01/08136

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 C12N5/08 A61K31/122 A61K35/12 A61P25/00 //C07C50/28

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)

IPC 7 C12N A61K

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 practical, search terms used)

EPO-Internal, BIOSIS, MEDLINE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 99 08987 A (MEIJI MILK PRODUCTS) 25 February 1999 (1999-02-25) the whole document ---	1-15
Y	GIRLANDA-JUNGES C ET AL: "Effect of Cyclohexenonic Long Chain Fatty Alcohols on Neurite Outgrowth. Study on Structure-Activity Relationship" TETRAHEDRON, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 54, no. 27, 2 July 1998 (1998-07-02), pages 7735-7748, XP004122484 ISSN: 0040-4020 the whole document -----	1-15

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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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

- *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
- *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
- *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.
- *&* document member of the same patent family

Date of the actual completion of the international search

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09/08/2002

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INTERNATIONAL SEARCH REPORT

national application No.
PCT/JP 01/08136

Box I Observations where certain claims were found unsearchable (Continuation of item 1 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:

Although claims 12-15 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. Claims Nos.:
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:
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 II Observations where unity of invention is lacking (Continuation of item 2 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 an additional fee, this Authority did not invite payment of any additional fee.
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.
- No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT
Information on patent family members

International Application No
PCT/JP 01/08136

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 9908987	A	25-02-1999	EP	1003706 A1	31-05-2000
			WO	9908987 A1	25-02-1999
			US	6228893 B1	08-05-2001
