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A61K 31/16 (2006.01) A61P 25/00 (2006.01)
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English

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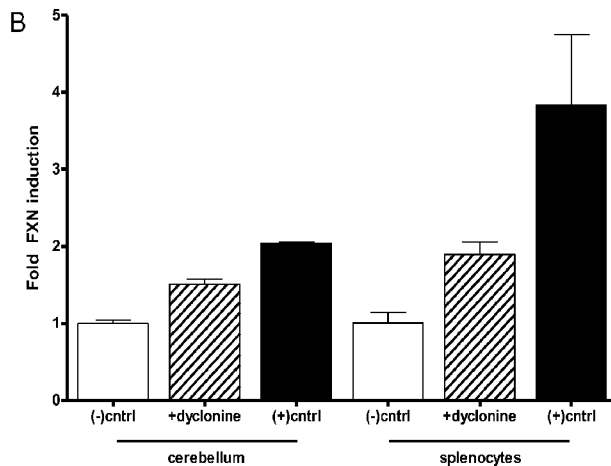
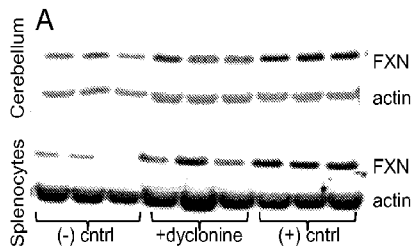
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[Continued on next page]

(54) Title: AGENTS USEFUL FOR TREATING FRIEDREICH'S ATAXIA AND OTHER NEURODEGENERATIVE DISEASES

Figs. 6A-B



(57) Abstract: This invention provides methods of identifying agents useful to prevent, ameliorate or treat one or more symptoms of Friedreich's ataxia or other neurodegenerative disease, and methods of employing the identified agents to prevent, reduce, delay or inhibit one or more symptoms of Friedreich's ataxia or other neurodegenerative disease.



UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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Published:

— *with international search report (Art. 21(3))*

A. CLASSIFICATION OF SUBJECT MATTER*A61K 31/166(2006.01)i, A61K 31/16(2006.01)i, A61K 31/435(2006.01)i, A61P 25/28(2006.01)i, A61P 25/00(2006.01)i*

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)

A61K 31/166; A61K 31/24; A61K 31/195; C12Q 1/00; C12N 5/06; A61K 31/41; G01N 33/50

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal), PubMed, NCBI, Esp@snet, PAJ, USPTO, Google

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	WO 1995-019166 A1 (SHAHINIAN, LEE, JR.) 20 July 1995 See the abstract, claims 10-12	14-15 25-27, 46-49
X Y A	US 2005-0222218 A1 (THOMAS MEIER, et al.) 6 October 2005 See the abstract, claims 1-4	46-47, 49 48 14-15, 25-27
Y A	ANDREW G. COX, et al., The thioredoxin reductase inhibitor auranofin triggers apoptosis through a Bax/Bak-dependent process that involves peroxiredoxin 3 oxidation. Biochemical Pharmacology 30 October 2008, 76(9), pp.1097-1109 See the abstract, Introduction part	48 14-15, 25-27, 46-47, 49
A	WO 2008-097596 A2 (BIOGEN IDEC MA INC., et al.) 14 August 2008 See the whole document.	14-15, 25-27, 46-49
A	US 2002-0164576 A1 (FINN SKOU PEDERSEN, et al.) 7 November 2002 See the whole document.	14-15, 25-27, 46-49

 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

"E" earlier application or patent 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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Date of mailing of the international search report

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Name and mailing address of the ISA/KR

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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.: 1-13, 16-24, 28-45, 53
because they relate to subject matter not required to be searched by this Authority, namely:
Claims 1-13, 16-24, 28-45, 53 pertain to methods for treatment of the human body by surgery or therapy, as well as diagnostic methods, and thus relate to a subject matter which this International Searching Authority is not required, under Article 17(2)(a)(i) of PCT and Rule 39.1(iv) of the Regulations under the PCT, to search.
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.: 43-45, 50-53
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 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 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

Information on patent family members

International application No.

PCT/US2012/035668

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2012/035668

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