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(54) Title: DETECTION AND TREATMENT OF MALIGNANT TUMOURS IN THE CNS

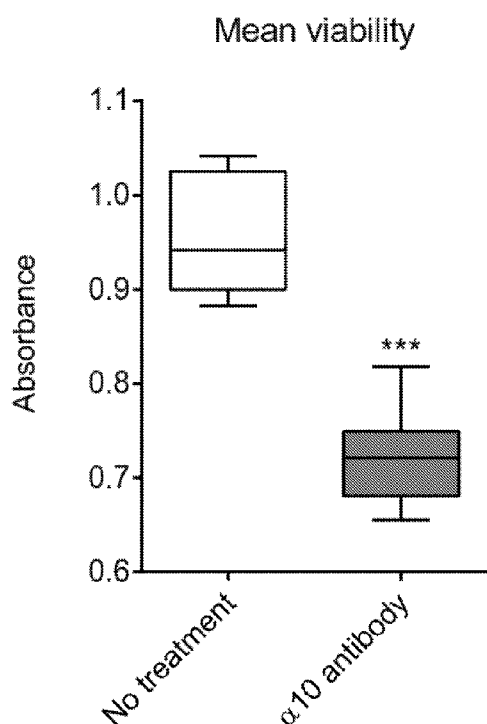


Fig. 11

(57) Abstract: The present invention concerns methods of diagnosing and treating a malignant neoplasm of the CNS by detecting mammalian tissue expressing integrin alpha 10 subunit or a fragment or variant thereof, and administering a drug specific for integrin alpha 10 subunit.

SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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6 October 2016

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/SE2016/050116

A. CLASSIFICATION OF SUBJECT MATTER

IPC: see extra sheet

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: A61K, C12Q, G01N

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

SE, DK, FI, NO classes as above

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

EPO-Internal, PAJ, WPI data, BIOSIS, CHEM ABS Data, COMPENDEX, EMBASE, INSPEC, MEDLINE, PUBCHEM

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2007107774 A2 (CARTELA AB ET AL), 27 September 2007 (2007-09-27); page 29, line 14 - line 29; page 51, line 14 - line 20; claims 7,14,20,41 --	1-16, 33-38, 41-48, 50, 52-57
X	WO 2004016758 A2 (GENZYME CORP ET AL), 26 February 2004 (2004-02-26); page 38, line 18 - page 39, line 8; claim 14 --	1-16, 33-38, 41-48, 50, 52-57
X	US 20080008707 A1 (FREIMARK BRUCE ET AL), 10 January 2008 (2008-01-10); paragraphs [0154], [0164], [0211]; page 51, column 1, paragraph [0489]; table 1	1, 4-16, 33-38, 41-48, 50, 52-54, 57
A	--	2-3, 55-56

 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

"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)

"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

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26-08-2016

Name and mailing address of the ISA/SE

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INTERNATIONAL SEARCH REPORT

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PCT/SE2016/050116

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 20070048325 A1 (VAN EPPS DENNIS ET AL), 1 March 2007 (2007-03-01)	1, 4-16, 33-38, 41-48, 50, 52-54, 57
A	--	2-3, 55-56
A	WENKE A-K et al. "Expression of integrin alpha10 is induced in malignant melanoma", 2007, vol 29, pages 373-386, Cellular Oncology; page 384, column 2, line 27 - line 47; figure 1A	1-16, 33-38, 41-48, 50, 52-57
A	BROWN M C et al. "Regulatory effect of nerve growth factor in alpha9beta1 integrin-dependent progression of glioblastoma", 2008, vol 10, pages 968-980, NEURO-ONCOLOGY.; whole document	1-16, 33-38, 41-48, 50, 52-57
A	WO 2005026334 A2 (UNIV CARDIFF ET AL), 24 March 2005 (2005-03-24); page 9, line 1; page 42, line 4 - line 6; claims 31-32	1-16, 33-38, 41-48, 50, 52-57
A	WO 9951639 A1 (ACTIVE BIOTECH AB ET AL), 14 October 1999 (1999-10-14); whole document; claim 70	1-16, 33-38, 41-48, 50, 52-57
A	WO 2004089990 A1 (CARTELA AB ET AL), 21 October 2004 (2004-10-21)	1-16, 33-38, 41-48, 50, 52-57
A	WO 2011026026 A1 (IMMUNOMEDICS INC ET AL), 3 March 2011 (2011-03-03); whole document	1-16, 33-38, 41-48, 50, 52-57
A	LOUIS et al., "The 2007 WHO Classification of Tumours of the Central Nervous System", 2007, vol 114, pages 97-109, Acta Neuropathol; whole document	1-16, 33-38, 41-48, 50, 52-57
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/SE2016/050116**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.:
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 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:

The following separate inventions were identified:

1: Claims 1-16, 53-57 completely and parts of claims 33-38, 41-48, 50, 52 directed to composition for use in the treatment of a malignant neoplasm in the central nervous system, comprising an antibody binding to an integrin alpha 10.

2. Claims 17-32, 39-40, 49 and 51 completely 33-38, 41-48, 50, 52 partially directed to a method of detecting a malignant neoplasm in the central nervous system, by identifying presence/absence of an integrin alpha 10.

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 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.:
1-16, 53-57 completely and parts of 33-38, 41-48, 50, 52

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.

Continuation of: second sheet

International Patent Classification (IPC)

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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/SE2016/050116

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