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(54) Title: MANNOSE DERIVATIVES FOR KILLING TUMOR CELLS

(57) Abstract: A method for treating cancer by killing selected tumor cells such as human breast, non-small cell lung cancer cells, pancreatic cancer cells, osteosarcoma cancer cells, and glioblastoma cells, includes administering to a patient in need of treatment, an effective amount of at least one mannose analog such as 2-DG or 2-FM or 2-CM. The killing is believed to be due to an interference with glycosylation. A theranostic method includes determining whether a patient, cancer tumor sample comprises cells sensitive to killing to at least one mannose analog due to an interference with glycosylation.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US07/04845 -

A. CLASSIFICATION OF SUBJECT MATTER

IPC: A01N 43/04(2006.01);A61K 31/70(2006.01)

USPC: 514/25

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. : 514/25

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)

Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 20050245462 A1 (TIDMARSH, George) 3 November 2005 (03.11.2005), entire document, specifically paragraph 0010, 0014, 0031	1-6
X	US 20050043250 (LAMPIDIS et al.) 24 Feb. 2005 (24.02.2005), entire document especially abstract, paragraph 0082, 0091	1-6
A	BECKNER et al. Glycolytic glioma cells with active glycogen synthase are sensitive to PTEN and inhibitors of PI3K and gluconeogenesis, Laboratory Investigation 2005, VOL. 85, pages 1457-1470, specifically, page 1461, Figure 1.	1-24



Further documents are listed in the continuation of Box C.

D

See patent family annex.

* Special categories of cited documents		"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
"A"	document defining the general state of the art which is not considered to be of particular relevance	"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
"E"	earlier application or patent published on or after the international filing date	"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
"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)	"&"	document member of the same patent family
"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		

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INTERNATIONAL SEARCH REPORT

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Continuation of B. FIELDS SEARCHED Item 3:
WEST (USPTO in-house database), PUBMED, Google
-2-dg, tumor (syn), normoxic/a