

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
11 December 2008 (11.12.2008)

PCT

(10) International Publication Number  
**WO 2008/148932 A3**

(51) International Patent Classification:

A61K 38/50 (2006.01) A61P 29/00 (2006.01)  
A61P 35/00 (2006.01)

(21) International Application Number:

PCT/FI2008/050283

(22) International Filing Date: 20 May 2008 (20.05.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

20070455 8 June 2007 (08.06.2007) FI  
60/942,721 8 June 2007 (08.06.2007) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:  
19 February 2009

(54) Title: GLYCOSYLASPARAGINASE FOR TREATMENT OF CANCERS OR INFLAMMATORY DISEASES

(57) Abstract: The invention concerns a glycosylasparaginase polypeptide with L-asparaginase activity or its precursor for use in the treatment or prevention of cancers or inflammatory diseases. The invention concerns also a novel pharmaceutical composition comprising either i) the glycosylasparaginase polypeptide or its precursor, or ii) an expression vector encompassing a nucleic acid sequence encoding the glycosylasparaginase polypeptide or its precursor for use in the treatment or prevention of cancers or inflammatory diseases.



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**INTERNATIONAL SEARCH REPORT**

International application No  
PCT/FI2008/050283

**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. A61K38/50 A61P35/00 A61P29/00

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 A61P C12N

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, EMBASE, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	WO 03/038113 A (MILLENNIUM PHARM INC [US]; WILLIAMSON MARK [US]; RUDOLPH-OWEN LAURA A) 8 May 2003 (2003-05-08) cited in the application claims page 2, line 14 - page 4, line 3	1-10
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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	*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
*E* earlier document but published on or after the international filing date	*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
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*O* document referring to an oral disclosure, use, exhibition or other means	*Z* document member of the same patent family
*P* document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  10 December 2008	Date of mailing of the international search report  29/12/2008
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Name and mailing address of the ISA/ European Patent Office, P.B. 5318 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer  Böhmerova, Eva
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## INTERNATIONAL SEARCH REPORT

International application No

PCT/FI2008/050283

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	YLIKANGAS PAIVI ET AL: "Serious neutropenia in ALL patients treated with L-asparaginase may be avoided by therapeutic monitoring of the enzyme activity in the circulation" THERAPEUTIC DRUG MONITORING, vol. 24, no. 4, August 2002 (2002-08), pages 502-506, XP009109534 ISSN: 0163-4356 abstract -----	1-10
A	REIFF A ET AL: "Treatment of collagen induced arthritis in DBA/1 mice with L-asparaginase." CLINICAL AND EXPERIMENTAL RHEUMATOLOGY 2001 NOV-DEC, vol. 19, no. 6, November 2001 (2001-11), pages 639-646, XP009109566 ISSN: 0392-856X abstract page 640, left-hand column, last paragraph - right-hand column, paragraph 2 -----	1-10
A	KAARTINEN V ET AL: "SUBSTRATE SPECIFICITY AND REACTION MECHANISM OF HUMAN GLYCOASPARAGINASE THE N-GLYCOSIDIC LINKAGE OF VARIOUS GLYCOASPARAGINES IS CLEAVED THROUGH A REACTION MECHANISM SIMILAR TO L ASPARAGINASE" JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 267, no. 10, 1992, pages 6855-6858, XP002506519 ISSN: 0021-9258 cited in the application abstract -----	1-10

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