

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
27 July 2006 (27.07.2006)

PCT

(10) International Publication Number
WO 2006/078911 A3

(51) International Patent Classification:
C12Q 1/68 (2006.01) *G01N 33/53* (2006.01)

(21) International Application Number:
PCT/US2006/002050

(22) International Filing Date: 19 January 2006 (19.01.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/645,349 19 January 2005 (19.01.2005) US

(71) Applicant (for all designated States except US): **GENZYME CORPORATION** [US/US]; 500 Kendall Street, Cambridge, Massachusetts 02142 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **TEICHER, Beverly** [US/US]; 1 Wadsworth Road, Ashland, Massachusetts 01721 (US). **SHANKARA, Shrinivas** [US/US]; 25 Stonybrook Lane, Shrewsbury, Massachusetts 01545 (US). **ROBERTS, Bruce** [US/US]; 108 Pinehill Road, Southboro, Massachusetts 01772 (US).

(74) Agent: **KONSKI, Antoinette, F.**; Foley & Lardner LLP, 1530 Page Mill Road, Palo Alto, California 94304-1125 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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, HU, IE, IS, IT, LT, LU, LV, MC, NL, 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:
28 June 2007

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.

(54) Title: G1TR ANTIBODIES FOR THE DIAGNOSIS OF NSCLC

(57) Abstract: The present invention provides methods and compositions for detecting, diagnosing, prognosing and monitoring the progress of cancers, e.g., NSCLC, of epithelial origin, e.g., lung, ovarian, breast, prostate and colon cancers and malignancies and kits for use in said methods. Further provided are methods for screening to identify agonists and antagonists of antigens associated with these cancers and malignancies.



WO 2006/078911 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/02050

A. CLASSIFICATION OF SUBJECT MATTER

IPC: C12Q 1/68(2006.01);G01N 33/53(2006.01)

USPC: 435/6,7.1

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. : 435/6, 7.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
MEDLINE, WEST, STIC sequence search SEQ ID NOs:1 and 2

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US Patent 6,509,173, Ni et al, filed 10/21/1998, issued 1/21/2003	1-10
X	US Patent 6,689,607, Ni et al, filed 7/27/2001, issued 2/10/2004	1-10
X	US Patent 6,503,184, Ni et al filed 2/23/2000, issued 1/7/2003	1-10
X	US Patent Application Publication 2003/0138426, Ni et al, filed 10/30/2002, published 7/24/2003	1-10
X	WO 00/50459, Ruben et al, published 8/31/2000	1-10
X	WO 99/20758, Ni et al, published 4/29/1999	1-10
X	WO 2004/108899 A2, Nicholson and Vernon, published 12/16/2004, filed 6/4/2004	1 and 6-10

☒ 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 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

Date of the actual completion of the international search

05 February 2007 (05.02.2007)

Date of mailing of the international

04 MAY 2007

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (571) 273-3201

Authorized officer

Laura Goddard

Telephone No. 571-272-8788

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/02050

Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:

a. type of material



a sequence listing



table(s) related to the sequence listing

b. format of material



on paper



in electronic form

c. time of filing/furnishing



contained in the international application as filed



filed together with the international application in electronic form



furnished subsequently to this Authority for the purposes of search

2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

3. Additional comments: