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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: NOVEL THERAPEUTIC TARGETS IN CANCER

(57) Abstract: The present invention relates to novel sequences for use in detection, diagnosis and treatment of cancers, especially lymphomas. The invention provides cancer associated (CA) polynucleotide sequences whose expression is associated with cancer. The present invention provides CA polypeptides associated with cancer that are present on the cell surface and present novel therapeutic targets against cancer. The present invention further provides diagnostic compositions and methods for the detection of cancer. The present invention provides monoclonal and polyclonal antibodies specific for the CA polypeptides. The present invention also provides diagnostic tools and therapeutic compositions and methods for screening, prevention and treatment of cancer.

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/15467

**A. CLASSIFICATION OF SUBJECT MATTER**  
**IPC:** C12N 15/12( 2006.01),15/00( 2006.01),15/85( 2006.01),15/63( 2006.01);G06F 17/00( 2006.01)  
 C12Q 1/68( 2006.01)  
**USPC:** 536/24.31;435/320.1,252.3,325,6  
 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. : 536/24.31; 435/320.1, 252.3, 325, 6

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)  
 Compugen, SEQ ID NO: 5

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/0165831 A1 (LEE et al) 04 September 2003 (04.09.2003), paragraphs 0001-0120 and 0305-0312, claims 1-66, and SEQ ID NO: 21924. compare SEQ ID NO: 5, nucleotides 12-1625 to reference SEQ ID NO: 21924, nucleotides 2-1615.	1-15, 45, 46, and 48


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 application or patent 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
“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)	“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
“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	“&” document member of the same patent family

Date of the actual completion of the international search  
 04 September 2006 (04.09.2006)

Date of mailing of the international search report  
**08 SEP 2006**

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/15467

**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.: 47 and 61-64  
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:  
Please See Continuation Sheet
  
- 3.  Claims Nos.: 42-44  
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 additional fees, this Authority did not invite payment of any 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.: 1-15, 45, 47, and 48 as they pertain to SEQ ID NO: 5 only

**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

International application No.

PCT/US05/15467

**Continuation of Box II Reason 2:**

Claim 47 was not searched. Although claim 46 is included in Group I, claim 47 does not include the first-mentioned SEQ ID NO: 5. Since Group I is searched and examined only to the extent that it pertains to SEQ ID NO: 5, no meaningful search can be performed for claim 47. Claims 61-64 are unsearchable because they refer to a table in the description (see PCT Rule 6.2(a)).