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(71) Applicant (*for all designated States except US*): **INCYTE GENOMICS, INC.** [US/US]; 3160 Porter Drive, Palo Alto, CA 94304 (US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **KRASNOW, Randi, E.** [US/US]; 817 Santa Fe Avenue, Stanford, CA 94305 (US). **BAUGHN, Mariah, R.** [US/US]; 14244 Santiago Road, San Leandro, CA 94577 (US).

(74) Agents: **HAMLET-COX, Diana** et al.; Incyte Genomics, Inc., 3160 Porter Drive, Palo Alto, CA 94304 (US).

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(54) Title: ATP-BINDING CASSETTE PROTEIN

(57) Abstract: The invention provides a mammalian cDNA which encodes a mammalian ATP-binding cassette protein. It also provides for the use of the cDNA, fragments, complements, and variants thereof and of the encoded protein, portions thereof and antibodies thereto for diagnosis and treatment of breast disorders, particularly breast proliferative fibrocystic disease, breast adenocarcinoma, and drug resistance. The invention additionally provides expression vectors and host cells for the production of the protein and a transgenic model system.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07K14/705 C07K14/47 C12N15/12 C12N15/11 C12N15/85
C12Q1/68 G01N33/53

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 7 C07K C12N C12Q G01N

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)

BIOSIS, SEQUENCE SEARCH, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO 01 32706 A (LEXICON GENETICS INC) 10 May 2001 (2001-05-10) * SEQ ID NO: 17 and 18 * the whole document ---	15-19
P,X	WO 01 57214 A (LEXICON GENETICS INC) 9 August 2001 (2001-08-09) * SEQ ID NO: 43 * the whole document ---	2
Y	WO 00 36101 A (BATES SUSAN E ;US HEALTH (US); ALLIKMETS RANDO (US); DEAN MICHAEL) 22 June 2000 (2000-06-22) the whole document --- -/--	1-19

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- *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.
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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Hillenbrand, G

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>ALLIKMETS R ET AL: "CHARACTERIZATION OF THE HUMAN ABC SUPERFAMILY: ISOLATION AND MAPPING OF 21 NEW GENES USING THE EXPRESSED SEQUENCE TAGS DATABASE" HUMAN MOLECULAR GENETICS, OXFORD UNIVERSITY PRESS, SURREY, GB, vol. 5, no. 10, 1996, pages 1649-1655, XP002074412 ISSN: 0964-6906 the whole document</p> <p style="text-align: center;">----</p>	1-19
Y	<p>DOYLE L A ET AL: "A MULTIDRUG RESISTANCE TRANSPORTER FROM HUMAN MCF-7 BREAST CANCER CELLS" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US, vol. 95, December 1998 (1998-12), pages 15665-15670, XP001055044 ISSN: 0027-8424 the whole document</p> <p style="text-align: center;">----</p>	1-19
Y	<p>YANG D L A ET AL: "CLONING AND CHARACTERIZATION OF BREAST CANCER RESISTANCE PROTEIN (BCRP), A NOVEL ATP-BINDING CASSETTE (ABC) TRANSPORTER THAT MAY CONTRIBUTE TO THE MULTIDRUG-RESISTANCE PHENOTYPE OF MCF-7/ADRVP BREAST CANCER CELLS" PROCEEDINGS OF THE 89TH. ANNUAL MEETING OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH. NEW ORLEANS, LA, MARCH 28 - APRIL 1, 1998, PROCEEDINGS OF THE ANNUAL MEETING OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH, PHILADELPHIA, PA: AACR, US, vol. 39, 28 March 1998 (1998-03-28), page 657 XP000891682 abstract</p> <p style="text-align: center;">-----</p>	1-19

INTERNATIONAL SEARCH REPORT

Information on patent family members

In **International Application No**
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Patent document cited in search report		Publication date		Patent family member(s)	Publication date
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			EP	1244698 A2	02-10-2002
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