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(54) Title: ENZYMATIC ASSAYS FOR SCREENING ANTI-CANCER AGENTS

(57) Abstract: Methods of identifying anti-cancer agents are provided based on ligand binding or enzymatic activity of TIP49 family members. The assays may include the measurement of ATPase and/or helicase activity. Also provided are anti-cancer agents identified by the screening methods of the invention, as well as the use of the agent for the prophylaxis or treatment of cancer. A complex of a TIP49 family member with various proteins that regulate transcription is also provided.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 01/05404

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12Q1/37 C12Q1/42 C12Q1/25 C07K14/47 G01N33/574
A61P35/00

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)
IPC 7 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)
EPO-Internal, WPI Data, MEDLINE, CHEM ABS Data, BIOSIS, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	MARCELO A. WOOD, STEVEN B MCMAHON, AND MICHAEL D. DOLE: "An ATPase/Helicase Complex IS an Essential Cofactor for Oncogenic Transformation by c-Myc" MOLECULAR CELL, vol. 5, no. 2, February 2000 (2000-02), pages 321--330, XP002181332	1-19, 21-29
X	the whole document	20
A	YASUTAKA MAKINO ET AL.: "TIP49, Homologous to the Bacterial DNA Helicase RuvB, Acts as an Autoantigen in Human" BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, vol. 245, no. 3, 1998, pages 819-823, XP002181333	1-20
X	the whole document	20, 21, 23

Further documents are listed in the continuation of box C.

Patent family members are listed in 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 document but 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.
- *Z* document member of the same patent family

Date of the actual completion of the international search 26 October 2001	Date of mailing of the international search report 09/11/2001
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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 Döpfer, K-P
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INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 01/05404

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 926 157 A (SUMITOMO ELECTRIC INDUSTRIES) 30 June 1999 (1999-06-30)	1-19
X	the whole document	20-25

A	DORJSUREN D ET AL: "RMP, A NOVEL RNA POLYMERASE II SUBUNIT 5-INTERACTING PROTEIN, COUNTERACTS TRANSACTIVATION BY HEPATITIS B VIRUS X PROTEIN" MOLECULAR AND CELLULAR BIOLOGY, AMERICAN SOCIETY FOR MICROBIOLOGY, WASHINGTON, US, vol. 18, no. 12, December 1998 (1998-12), pages 7546-7555, XP000857959 ISSN: 0270-7306 cited in the application	1-29
	the whole document	

X	SALZER U ET AL: "Isolation, molecular characterization, and tissue-specific expression of ECP-51 and ECP-54 (TIP49), two homologous, interacting erythroid cytosolic proteins" BIOCHIMICA ET BIOPHYSICA ACTA. GENE STRUCTURE AND EXPRESSION, ELSEVIER, AMSTERDAM, NL, vol. 1446, no. 3, 3 September 1999 (1999-09-03), pages 365-370, XP004275458 ISSN: 0167-4781 abstract	20

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.1

Although claim 25 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

Continuation of Box I.1

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy

INTERNATIONAL SEARCH REPORT

Information on patent family members

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PCT/EP 01/05404

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
EP 0926157	A	30-06-1999	JP 11009285 A	19-01-1999
			EP 0926157 A1	30-06-1999
			WO 9900419 A1	07-01-1999
