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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 97/09584

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 C12N15/12 C07K14/47 C07K16/18 A61K38/17 G01N33/68
C12Q1/68 C12N15/11 A61K31/70 //C12N15/55,
C12N9/14

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 6 C12N C07K A61K G01N C12Q

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 95 13375 A (UNIV JOHNS HOPKINS) 18 May 1995 see the whole document ---	1-53, 115-119, 123,124
Y	OKAMOTO K. AND BEACH D.: "Cyclin G is a transcriptional target of the p53 tumor suppressor protein." EMBO JOURNAL, vol. 13, no. 19, 1994, pages 4816-4822, XP002046024 see the whole document --- -/-	1-53, 115-119, 123,124

☒ 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

7 November 1997

Date of mailing of the international search report

17.03.98

Name and mailing address of the ISA

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Mandl, B

INTERNATIONAL SEARCH REPORT

Intern. Application No

PCT/US 97/09584

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	MICHALOVITZ D. ET AL.: "Conditional inhibition of transformation and of cell proliferation by a temperature-sensitive mutant of p53." CELL, vol. 62, 1990, pages 671-680, XP002046026	1-13, 31-40, 116-118, 123,124
A	see the whole document	14-30, 41-53, 115,119
Y	BAUER D. ET AL.: "Identification of differentially expressed mRNA species by an improved display technique." NUCLEIC ACIDS RESEARCH, vol. 21, no. 18, 1993, pages 4272-4280, XP000394394 see the whole document	1-13, 31-40, 116-118, 123,124
A	WO 96 01907 A (SQUIBB BRISTOL MYERS CO) 25 January 1996 see the whole document	1-53, 115-119, 123,124
A	EL-DEIRY W.S. ET AL.: "WAF1, a potential mediator of p53 tumor suppression." CELL, vol. 75, 1993, pages 817-825, XP002046022 see the whole document	1-53, 115-119, 123,124
A	BUCKBINDER L. ET AL.: "Gene regulation by temperature-sensitive p53 mutants: Identification of p53 response genes." PROC. NATL. ACAD. SCI. USA, vol. 91, 1994, pages 10640-10644, XP002046023 see the whole document, especially page 10640, from left column, last line to right column second line and page 10644, left column, last paragraph	1-53, 115-119, 123,124
A	EMBL database entry HS52516; accession number T33525; 9. September 1995; Adams M.D. et al.: 'Initial assessment of human gene diversity and expression patterns based upon 52 million basepairs of cDNA sequence.' XP002046045 see abstract	1-10, 31-40

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INTERNATIONAL SEARCH REPORT

International Application No

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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.
P,X	MADDEN S.L. ET AL.: "Induction of cell growth regulatory genes by p53." CANCER RESEARCH, vol. 56, 1 December 1996, pages 5384-5390, XP002046025 see the whole document -----	1-53, 115-119, 123,124

INTERNATIONAL SEARCH REPORT

national application No.

PCT/US 97/ 09584

Box I Observations where certain claims were found unsearchable (Continuation of item 1 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:
Remark: Although claims 14-19, 41-50 and 119, as far as they are concerning an in vivo method, are 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.
2. ☐ Claims Nos.:
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:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see continuation-sheet

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 an additional fee, this Authority did not invite payment of any additional fee.
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.:

1-53 and 124 (complete), 115-119 and 123 (partially)

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

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International Application No. PCT/ US 97/09584

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

1. Claims: 1-53 and 124 (complete),
115-119 and 123 (partially)

DNA molecule encoding CGR11, expression vector and host cell containing said DNA molecule; mammalian CGR11; antibody against mammalian CGR11; antisense molecules targeted against CGR11; method of suppressing growth of tumor cells by administering CGR11 or the DNA molecule that encodes CGR11; method for diagnosing cancer by measuring expression level of CGR11 or the corresponding mRNA or by identifying a mutation in the CGR11 gene; method for promoting cell proliferation by administering antisense molecules targeted against CGR11; method for assessing the susceptibility to cancer by identifying a mutation in the CGR11 gene; pharmaceutical composition comprising CGR11;

2. Claims: 54-106 (complete), 115-119 and 123 (partially)

DNA molecule encoding CGR19, expression vector and host cell containing said DNA molecule; mammalian CGR19; antibody against mammalian CGR19; antisense molecules targeted against CGR19; method of suppressing growth of tumor cells by administering CGR19 or the DNA molecule that encodes CGR19; method for diagnosing cancer by measuring expression level of CGR19 or the corresponding mRNA or by identifying a mutation in the CGR19 gene; method for promoting cell proliferation by administering antisense molecules targeted against CGR19; method for assessing the susceptibility to cancer by identifying a mutation in the CGR19 gene; pharmaceutical composition comprising CGR19;

3. Claims: 107-122 (partially)

expression vector and host cell containing DNA molecule encoding mEH and host cell containing said expression vector; antisense molecules targeted against mEH; method of suppressing growth of tumor cells by administering mEH or the DNA molecule that encodes mEH; method for diagnosing cancer by measuring expression level of mEH or the corresponding mRNA or by identifying a mutation in the mEH gene; method for promoting cell proliferation by administering antisense molecules targeted against mEH; method for assessing the susceptibility to cancer by identifying a mutation in the mEH gene; pharmaceutical composition comprising mEH

4. Claims: 107-122 (partially)

expression vector and host cell containing DNA molecule encoding SM20 and host cell containing said expression vector; antisense molecules targeted against SM20; method of suppressing growth of tumor cells by administering SM20 or

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FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

the DNA molecule that encodes SM20; method for diagnosing cancer by measuring expression level of SM20 or the corresponding mRNA or by identifying a mutation in the SM20 gene; method for promoting cell proliferation by administering antisense molecules targeted against SM20; method for assessing the susceptibility to cancer by identifying a mutation in the SM20 gene; pharmaceutical composition comprising SM20

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 97/09584

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9513375 A	18-05-95	NONE	

WO 9601907 A	25-01-96	US 5667987 A	16-09-97
		EP 0804609 A	05-11-97
