METHODS AND MATERIALS FOR ASSESSING CANCER AGGRESSIVENESS

The invention involves the predicting the aggressiveness of cancer. Specifically, the invention provides methods and materials for evaluating the ratio of CB to stefin A such that the aggressiveness of cancer can be predicted.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12Q1/68 G01N33/53 G01N33/574 C12Q1/37 C12N9/64

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 G01N C12Q C12N

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, EPO-Internal, EMBASE, MEDLINE, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<tr>
<td>X</td>
<td>SINHA AKHOURI A ET AL: &quot;The relationship of cathepsin B and stefin A mRNA localization identifies a potentially aggressive variant of human prostate cancer within a Gleason histologic score.&quot; ANTICANCER RESEARCH, vol. 19, no. 4B, July 1999 (1999-07), pages 2821-2829, XP002220070 ISSN: 0250-7005 abstract page 2822, column 2, paragraph 4 -page 2823, column 1, paragraph 3 page 2824, column 1, paragraph 3 -column 2, paragraph 1; table 1 page 2824, column 2, paragraph 3; figure 3</td>
<td>1-11, 35-37</td>
</tr>
</tbody>
</table>

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

X 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 doubt 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 discussion, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

** 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

10 December 2002

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

Date of mailing of the international search report

28.04.03

Authorized officer

Tilkorn, A-C

Form PCT/ISA/210 (second sheet) (July 1992)
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<tr>
<td>X</td>
<td>LAH TT ET AL: PATHOLOGY ONCOLOGY RESEARCH, vol. 3, no. 2, 1997, pages 89-99, XP001117860 abstract page 91, column 2, paragraph 2 - paragraph 5 page 95, column 1, paragraph 1 - paragraph 2 page 97, column 2, paragraph 1</td>
<td>38</td>
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<td>A</td>
<td>KOS JANKO ET AL: &quot;Cysteine proteinases and their endogenous inhibitors: Target proteins for prognosis, diagnosis and therapy in cancer (Review).&quot; ONCOLOGY REPORTS, vol. 5, no. 6, November 1998 (1998-11), pages 1349-1361, XP001030675 abstract page 1352, column 1, paragraph 3 page 1353, column 2, paragraph 3 - page 1354, column 1, paragraph 5 page 1355, column 1, paragraph 2; figure 3; table 1</td>
<td>1-38</td>
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<td>E</td>
<td>DE 100 30 827 A (UNIV EBERHARD KARLS) 10 January 2002 (2002-01-10) SEQ ID NOs 3 and 4 page 2, line 10 - line 30; examples 2,6</td>
<td>35-37</td>
</tr>
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INTERNATIONAL SEARCH REPORT

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. [x] Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:

   Although claims 8 and 25 are directed to in vivo methods the search has been carried out and based on the alleged effects (Rule 39.1(iv) PCT).

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 additional 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. [x] 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.:

   6, 17, 29 (completely), 1-5, 7-16, 18-28, 30-38 (partially)

Remark on Protest

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

[ ] No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet (1)) (July 1998)
This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 6, 17, 29 (completely), 1-5, 7-16, 18-28, 30-38 (partially)

   methods and kits for determining the aggressiveness of prostate cancer in a mammal based on the ratio between a cathepsin and a stefin

2. Claims: 1-5, 7-16, 18-28, 30-38 (partially)

   methods and kits for determining the aggressiveness of breast cancer in a mammal based on the ratio between a cathepsin and a stefin

3. Claims: 1-5, 7-16, 18-28, 30-38 (partially)

   methods and kits for determining the aggressiveness of skin cancer in a mammal based on the ratio between a cathepsin and a stefin

4. Claims: 1-5, 7-16, 18-28, 30-38 (partially)

   methods and kits for determining the aggressiveness of brain cancer in a mammal based on the ratio between a cathepsin and a stefin

5. Claims: 1-5, 7-16, 18-28, 30-38 (partially)

   methods and kits for determining the aggressiveness of colon cancer in a mammal based on the ratio between a cathepsin and a stefin

6. Claims: 1-5, 7-16, 18-28, 30-38 (partially)

   methods and kits for determining the aggressiveness of lung cancer in a mammal based on the ratio between a cathepsin and a stefin

7. Claims: 1-5, 7-16, 18-28, 30-38 (partially)

   methods and kits for determining the aggressiveness of ovary cancer in a mammal based on the ratio between a cathepsin and a stefin

8. Claims: 1-5, 7-16, 18-28, 30-38 (partially)
methods and kits for determining the aggressiveness of bladder cancer in a mammal based on the ratio between a cathepsin and a stefin
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<td></td>
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<td>WO 0198475 A2</td>
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