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— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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: DIAGNOSTIC AND THERAPEUTICS FOR DISEASES ASSOCIATED WITH RHO-ASSOCIATED PROTEIN KINASE 2 (ROCK2)

(57) Abstract: The invention provides a human ROCK2 which is associated with cardiovascular diseases, dermatological diseases, endocrinological diseases, metabolic diseases, inflammation, gastroenterological diseases, cancer, hematological diseases, respiratory diseases, muscle-skeleton diseases, neurological diseases, reproduction diseases and urological diseases. The invention also provides assays for the identification of compounds useful in the treatment or prevention of cardiovascular diseases, dermatological diseases, endocrinological diseases, metabolic diseases, inflammation, gastroenterological diseases, cancer, hematological diseases, respiratory diseases, muscle-skeleton diseases, neurological diseases, reproduction diseases and urological diseases. The invention also features compounds which bind to and/or activate or inhibit the activity of ROCK2 as well as pharmaceutical compositions comprising such compounds.
INTERNATIONAL SEARCH REPORT

Application No
PCT/EP2005/001920

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12Q1/48

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

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database consulted during the international search (name of database and, where practical, search terms used)
EPO-Internal, MEDLINE, BIOSIS, EMBASE, PAJ, WPI Data, Sequence Search

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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<td>X</td>
<td>WO 03/091419 A (INCYTE CORPORATION; MASON, PATRICIA M; CHANG, HSIN-RU; KAMIGAKI, LAUR) 6 November 2003 (2003-11-06) page 23, line 33 - page 24, line 3 page 27, line 21 - page 28, line 12 page 60, lines 9-16 page 80, lines 25-35 claims 17,21,24,32 sequences 11,50</td>
<td>1-11, 18-21, 23-26</td>
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<td>A</td>
<td>US 6 673 549 B1 (FURNESS L. MICHAEL ET AL) 6 January 2004 (2004-01-06) the whole document</td>
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</table>

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents:
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Date of the actual completion of the international search
22 September 2005

Date of mailing of the international search report
31 October 2005

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Authorized officer
Helliot, B

Form PCT/ISA/E/10 (second sheet) (January 2004)
INTERNATIONAL SEARCH REPORT

Box 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:
   Although claims 26 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 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:

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. ☑ 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.:

   1–26 (partially)

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

☐ No protest accompanied the payment of additional search fees.
This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-26 (partially)


2. claims: 1-26 (partially)

Same subject-matter as for invention 1 but relating to esophagus cancer (p. 63, tumor).

3. claims: 1-26 (partially)

Same subject-matter as for invention 1 but relating to liver cancer (p. 63, tumor).

4. claims: 1-26 (partially)

Same subject-matter as for invention 1 but relating to ovary cancer (p. 63, tumor).

5. claims: 1-26 (partially)

Same subject-matter as for invention 1 but relating to breast cancer (p. 63, tumor).

6. claims: 1-26 (partially)

Same subject-matter as for invention 1 but relating to prostate cancer (p. 63, tumor).

7. claims: 1-26 (partially)

Same subject-matter as for invention 1 but relating to Alzheimer (p. 44, neurological diseases).

8. claims: 1-26 (partially)
Same subject-matter as for invention 1 but relating to prostate BPH (p. 68, urological diseases).
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<th>Patent document cited in search report</th>
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<th>Patent family member(s)</th>
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<tr>
<td>WO 03097822 A</td>
<td>27-11-2003</td>
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<td>EP 1506290 A1</td>
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<td>US 6673549 B1</td>
<td>06-01-2004</td>
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