(54) Title: NUCLEAR RECEPTOR ASSAY

(57) Abstract: The present invention relates to methods for measuring compound efficacy and potency on nuclear receptor-co-regulator interaction, comprising the steps of (a) co-incubating at least one nuclear receptor and at least one compound under conditions that allow interaction; (b) co-incubating the nuclear receptor-compound mixture of step (a) with an array of co-regulators, under conditions that allow compound modulated receptor-co-regulator interaction; (c) determination of compound-modulated receptor-co-regulator interaction in function of co-regulator concentration, and (d) determination of compound-modulated receptor-co-regulator interaction in function of compound concentration; wherein steps (c) and (d) are performed in a single assay.
Declaration under Rule 4.17:
— of inventorship (Rule 4.17(iv))

Published:
— with international search report
— with sequence of description published separately in electronic form and available upon request from the International Bureau

Date of Publication of the revised international search report: 6 November 2008

Information about Correction:
see Notice of 6 November 2008
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
INV. G01N33/566

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

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, BIOSIS, EMBASE

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>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>US 2005/202440 A1 (FLETTERICK ROBERT [US] ET AL) 15 September 2005 (2005-09-15) abstract; claims 1-14; figure 9</td>
<td>1,2,4-10</td>
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<tr>
<td>X</td>
<td>WO 99/59664 A (BOSTON SCIENT CORP [US]) 25 November 1999 (1999-11-25) claims 4,5</td>
<td>1,2,4-10</td>
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</table>

Further documents are listed in the continuation of Box C. See patent family annex.

Date of the actual completion of the international search

25 February 2008

Name and mailing address of the ISA/
European Patent Office, P B. 5818 Patentlaan 2
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Authorized officer
Rosin, Oliver

Date of mailing of the international search report

13/05/2008
**INTERNATIONAL SEARCH REPORT**

**Box No. 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:

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 No. 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

2. [ ] As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

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.:

   1-2, 4-15 (all in part)

**Remark on Protest**  
☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.

☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

☐ 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: 1-2 and 4-15 (all in part)

   Method for measuring compound efficacy and potency on nuclear receptor-co-regulator interaction and use thereof.

2. claims: 1 and 3-15 (all in part)

   Method for measuring compound efficacy and potency on G-coupled receptor-co-regulator interaction and use thereof.

3. claims: 1 and 3-15 (all in part)

   Method for measuring compound efficacy and potency on 7-transmembrane receptor-co-regulator interaction and use thereof.

4. claims: 1 and 3-15 (all in part)

   Method for measuring compound efficacy and potency on ion channel-co-regulator interaction and use thereof.

5. claims: 1 and 3-15 (all in part)

   Method for measuring compound efficacy and potency on enzyme-co-regulator interaction and use thereof.
<table>
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<tr>
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<th>Publication date</th>
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<th>Publication date</th>
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