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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: HUMAN MARKER GENES AND AGENTS FOR CARDIOVASCULAR DISORDERS AND ARTEROSCLEROSIS

(57) Abstract: The invention relates to novel targets in the screening for compounds useful in the treatment and/or prophylaxis of a disease selected from the group comprising cardiovascular diseases, disorders of lipid metabolism or atherosclerosis. The invention relates to novel compounds for use as a medicament for diseases or conditions involving a disease selected from the group comprising cardiovascular diseases, disorders of lipid metabolism or atherosclerosis. The invention especially relates to antagonists and expression-inhibitory compounds that target G-protein coupled receptors (GPCRs), kinases and proteases, and to methods for identifying such compounds. The invention further relates to methods for identifying these antagonists and expression-inhibitory compounds, and methods for diagnosing a disease selected from the group comprising cardiovascular diseases, disorders of lipid metabolism or atherosclerosis or a susceptibility to such a condition.



WO 2006/108584 A3

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2006/003219

A. CLASSIFICATION OF SUBJECT MATTER
INV. G01N33/68 G01N33/566

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)

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, Sequence Search, WPI Data, PAJ, EMBASE, BIOSIS, INSPEC, FSTA, COMPENDEX, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2005/012565 A (ASTRAZENECA AB; ASTRAZENECA UK LIMITED; EDWARDS, MARK, RICHARD; OLSSON) 10 February 2005 (2005-02-10) page 1, paragraph 2 page 2, paragraph 2 ----- -/--	1-41

☒ Further documents are listed in the continuation of Box C.

☒ See patent family 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.

"&" document member of the same patent family

Date of the actual completion of the international search

14 September 2006

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International application No

PCT/EP2006/003219

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PACHECO-ALVAREZ DIANA ET AL: "Paradoxical regulation of biotin utilization in brain and liver and implications for inherited multiple carboxylase deficiency" JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY OF BIOCHEMICAL BIOLOGISTS, BIRMINGHAM,, US, vol. 279, no. 50, 10 December 2004 (2004-12-10), pages 52312-52318, XP002384302 ISSN: 0021-9258 the whole document -----	1-41
A	WO 03/023407 A (GENFIT; NAJIB, JAMILA; MAJD, ZOUHER) 20 March 2003 (2003-03-20) claims 1-10 -----	1-41
A	WO 02/062839 A (UNIVERSITEIT MAASTRICHT; DAEMEN, MATTHIAS, JOSEPH, ALPHONS, PIETER; CL) 15 August 2002 (2002-08-15) claims 1-7 page 7, line 39 - page 8, line 11 -----	1-41
A	US 2003/208043 A1 (MOORE PAUL A ET AL) 6 November 2003 (2003-11-06) sequences 7,18 -----	1-41

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2006/003219

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:

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.:

1-41 partially

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: invention 1: claims 1-41 (partially)

Screening methods using holocarboxylase synthetase (= Target No. 2) as screening target for identifying compounds for the treatment of cardiovascular diseases, disorders of lipid metabolism or atherosclerosis; method of diagnosing cardiovascular diseases, disorders of lipid metabolism or atherosclerosis using holocarboxylase synthetase as marker; use of iRNA specific for holocarboxylase synthetase (= SEQ.ID. No's 1-3) for the manufacture of a medicament for treating cardiovascular diseases, disorders of lipid metabolism or atherosclerosis; a vector comprising said SEQ.ID.No's; first medical use of said vectors and second medical use of said vectors in relation to the treatment of cardiovascular diseases, disorders of lipid metabolism or atherosclerosis

2. claims: invention 2-72: claims 1-41 (partially)

Screening methods using the different targets (72 in total) as indicated in table 10, starting from Target No. 3, as screening target for identifying compounds for the treatment of cardiovascular diseases, disorders of lipid metabolism or atherosclerosis; method of diagnosing cardiovascular diseases, disorders of lipid metabolism or atherosclerosis using said markers; use of iRNA specific for said markers (with corresponding SEQ.ID.No's) for the manufacture of a medicament for treating cardiovascular diseases, disorders of lipid metabolism or atherosclerosis; a vector comprising said SEQ.ID.No's; first medical use of said vectors and second medical use of said vectors in relation to the treatment of cardiovascular diseases, disorders of lipid metabolism or atherosclerosis

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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