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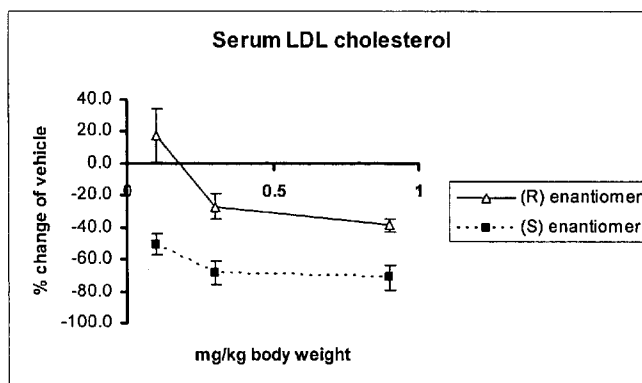
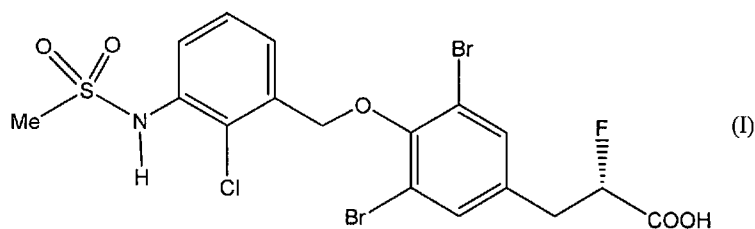
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[Continued on next page]

(54) Title: AN OPTICALLY ACTIVE THYROID RECEPTOR AGONIST AND OPTICALLY ACTIVE KEY INTERMEDIATES IN ITS PRODUCTION



(57) Abstract: The invention provides an optically active form of the compound of formula (I), or a pharmaceutically acceptable ester, amide, solvate or salt thereof, including a salt of such an ester or amide, and a solvate of such an ester, amide or salt; uses of the compound; and methods of preparation of the compound.

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Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

(88) Date of publication of the international search report:

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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.

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2006/009184

A. CLASSIFICATION OF SUBJECT MATTER

INV. C07C59/56 C07C217/76 C07C311/08 C07C205/34

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)

C07C

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, BEILSTEIN Data, CHEM ABS Data, WPI Data, PAJ, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P	WO 2005/092316 A (KAROBIO AB [SE]; GARCIA COLLAZO ANNA MARIA [SE]; ERICSSON THOMAS ANDER) 6 October 2005 (2005-10-06) compound 55, page 56 page 4, lines 28-30; claims 1-19 page 46, line 25 - page 47, line 19; example 61	1-11,18, 23-28
A,P	WO 2005/092317 A (KAROBIO AB [SE]; GARCIA COLLAZO ANA MARIA [SE]; ERICSSON THOMAS ANDERS) 6 October 2005 (2005-10-06) pages 62-63; examples 122-124 description 13, page 67 compound 10, page 69 pages 68-69	1-21, 23-28
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 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.

Z document member of the same patent family

Date of the actual completion of the international search

1 March 2007

Date of mailing of the international search report

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INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2006/009184

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>WO 01/36365 A2 (KAROBIO AB [SE]; MALM JOHAN [SE]; LITTEN CHRIS [SE]; APELQVIST THERESA) 25 May 2001 (2001-05-25) in particular example 104 and pages 25-26, scheme 7 with its explanation the whole document</p> <p style="text-align: center;">-----</p>	1-21, 23-28
Y	<p>HAIGH D ET AL: "Anomalous fluorination of 3-aryl-2-hydroxypropanoic esters by diethylaminosulfur trifluoride (DAST)" JOURNAL OF THE CHEMICAL SOCIETY, PERKIN TRANSACTIONS 1, CHEMICAL SOCIETY. LETCHEWORTH, GB, no. 24, 1996, pages 2895-2900, XP002153922 ISSN: 0300-922X cited in the application the whole document</p> <p style="text-align: center;">-----</p>	1-21, 23-28
Y	<p>F.F.HUERTA ET AL.: "Dynamic kinetic resolution of alpha-hydroxy acid esters" ORGANIC LETTERS, vol. 2, no. 8, 2000, pages 1037-1040, XP002422791 cited in the application scheme 3, compound 1f table 2, entry 10 table 3, entry 6 conclusions</p> <p style="text-align: center;">-----</p>	1-21, 23-28
X	<p>EP 0 887 346 A2 (HOFFMANN LA ROCHE [CH]) 30 December 1998 (1998-12-30) example 5I, page 78claims 1-3,6,7</p> <p style="text-align: center;">-----</p>	18

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2006/009184

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.: 22
because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 4 and 5 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 of formula (I).
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.:
1-21, 23-28

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: 1-21,23-28

compound of formula (I), production process and medical uses thereof as well as its intermediates of formulae (IIa), (IIIa), (IVaa), (VII), (IX), (XI), (XII), (XIII) and (XIV)

2. claim: 22

production of compounds of formulae (XI), (XII), (XIII) and (XIV)

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2006/009184

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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