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ning of each regular issue of the PCT Gazette.*

(54) Title: SCREENING FOR AGENTS SUITABLE FOR TREATMENT OF LEUKOCYTE ASSOCIATED INFLAMMATORY DISEASES

(57) Abstract: The invention relates to an assay for substances that modulate the activity of a polypeptide encoded human transient receptor potential 6 gene (TRPC6). The assay involves combining a candidate substrate substance with the polypeptide and measuring the effect of the candidate substance on the activity of said polypeptide. Such substances may be used in the preparation of pharmaceuticals for treating inflammatory diseases, particularly those associated with leukocytes.



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INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/08313

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 G01N33/566 G01N33/68 A61K39/00 A61K48/00 A61K31/4174

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

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, CHEM ABS Data, WPI Data, PAJ, BIOSIS, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97 25063 A (WELLESLEY CENTRAL HOSPITAL ;BERGER STUART ALAN (CA); GOMMERMAN JEN) 17 July 1997 (1997-07-17) page 5, line 9 - line 20 page 6, line 31,32; claim 62 ---	4,5,10
X	WO 02 48342 A (ALLEN KEITH D ;DELTA GEN INC (US)) 20 June 2002 (2002-06-20) page 26, line 17 -page 33, line 29; claim 18 ---	4
Y	BAERSCH, G. ET AL: "Differential effects of two calcium channel blockers on bronchial smooth muscle" ARZNEIMITTEL-FORSCHUNG, vol. 45, no. 12, 1995, pages 1294-1297, XP008027738 abstract ---	1-3,7,9, 10,12
Y	---	1-3,7,9, 10,12
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☒ Further documents are listed in the continuation of box C.

☒ 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 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

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INTERNATIONAL SEARCH REPORT

International Application No.

PCT/EP 03/08313

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	INOUE R. ET AL: "The transient receptor potential protein homologue TRP6 is the essential component of vascular alpha(1)-adrenoceptor-activated Ca(2+)-permeable cation channel" CIRCULATION RESEARCH, vol. 88, no. 3, 2001, pages 325-332, XP002220260 ISSN: 0009-7330 cited in the application table 2	1-12
X	CHUNG, S. ET AL: "Inhibition by SK&F 96365 of Ca2+ current, IL-2 production and activation in T lymphocytes" BRITISH JOURNAL OF PHARMACOLOGY, vol. 113, no. 3, 1994, pages 861-868, XP008027740 page 861, column 2, paragraph 2	4,5
A	WO 00 04929 A (UNIV SOUTH ALABAMA) 3 February 2000 (2000-02-03) page 7, line 28 -page 8, line 3; claims 1-13	1-12
A	TIRUPPATHI C ET AL: "IMPAIRMENT OF STORE-OPERATED CA2+ ENTRY IN TRPC4-/- MICE INTERFERES WITH INCREASE IN LUNG MICROVASCULAR PERMEABILITY" CIRCULATION RESEARCH, GRUNE AND STRATTON, BALTIMORE, US, vol. 91, no. 1, July 2002 (2002-07), pages 70-76, XP008010300 ISSN: 0009-7330 abstract	1-12

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP 03/08313

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. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 4, 10, 11 'partially!
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:
see FURTHER INFORMATION sheet PCT/ISA/210
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:

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.:

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

Continuation of Box I.2

Claims Nos.: 4, 10, 11 'partially!

Present claims 4, 10 and 11 relate to a compound defined by reference to a desirable characteristic or property, namely being a TRP6 inhibitor.

The claims cover all compounds having this characteristic or property, whereas the application provides support within the meaning of Article 6 PCT and disclosure within the meaning of Article 5 PCT for only a very limited number of such compounds. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the compound by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible. Consequently, the search has been carried out for those parts of the claims which appear to be clear, supported and disclosed, namely those parts relating to the compounds being antisense TRP6, an antibody against TRP6 or

1-'b-'3-(4-methoxyphenyl)propoxy!-4-methoxyphenethyl!-1H-imidazole.HCl.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/08313

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9725063	A	17-07-1997	AT 245448 T	15-08-2003
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			WO 0004929 A1	03-02-2000