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Applicant (for all designated States except US): NEUROGEN CORPORATION [US/US]; 35 Northeast Industrial Road, Branford, CT 06405 (US).


Published: with international search report

Date of publication of the international search report: 21 August 2008

Title: HETEROARYL AMIDE DERIVATIVES

Abstract: Heteroaryl amide derivatives are provided, of the Formula: wherein variables are as described herein. Such compounds are ligands that may be used to modulate specific receptor activity in vivo or in vitro, and are particularly useful in the treatment of conditions associated with pathological receptor activation in humans, domesticated companion animals and livestock animals. Pharmaceutical compositions and methods for using such compounds to treat such disorders are provided, as are methods for using such ligands for receptor localization studies.
INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 07/24396

A CLASSIFICATION OF SUBJECT MATTER
IPC(8) - A01 N 55/02; A61 K 31/555 (2008.01)
USPC - 514/185-186

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)
USPC: 514/185-186

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched 514/210.09, 230.5, 233.5, 233.8, 234.2, 235.2, 257, 258 1, 259.3, 299-300, 412-414, 656-657, 680-681; 566/818; 585/352 (text search-see search terms below))

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PubWEST/USPT,PGP,LEPAB,JPAB); DialogWeb; Google Scholar
Search Terms Used: adamantan, P2X7, inhibitor, antagonist, cirrhosis.

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 Y</td>
<td>WO 2006/025783 A1 (FORD et al ) 09 March 2006 (09.03.2006) pg 1, ln 18-25, pg 36, ln 7-8; pg 38, ln 6-7; pg 157, ln 6 to pg 158</td>
<td>55-58 59</td>
</tr>
<tr>
<td>Y</td>
<td>SEeman et al. NAD-Induced T Cell Death: ADP-Ribosylation of Cell Surface Proteins by ART2 Activates the Cytolytic P2X7 Purinoceptor. Immunity, October 2003, Vol 19:571-582, especially pg 574, section titled &quot;P2X7 is ADP Ribosylated&quot;; fig 5C</td>
<td>51</td>
</tr>
</tbody>
</table>

Further documents are listed in the continuation of Box C

Date of the actual completion of the international search 31 March 2008 (31.03.2008)

Date of mailing of the International Search Report 25 APRIOOS

Authorized officer: Lee W. Young

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Form PCT/ISA/2 10 (second sheet) (April 2007)
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  LJ  Claims Nos
because they relate to subject matter not required to be searched by this Authority, namely

2  D  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  X  Claims Nos 5-19, 23-30, 36-50, 52-54 and 60-61
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 64(a)

Box No. HI  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

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 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

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