Abstract: Novel compounds inhibiting the integrin α2β1/GPIa-IIa receptor are disclosed. Also disclosed are pharmaceutical compositions containing the compounds, as well as methods of their therapeutic uses. The compounds disclosed are useful, inter alia, as inhibitors of integrin α2β1/GPIa-IIa-mediated activity.
INTERNATIONAL SEARCH REPORT

INTERNATIONAL APPLICATION NUMBER:
PCT/US 06/33819

A CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G01N 33/53; A61K 39/00, A61K 39/395 (2007.01)
USPC - 435/7 2; 530/388.22, 514/19, 546/210

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 - 435/7 2, 530/388.22, 514/19, 546/210

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
None

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
US Pre-Grant Publication Full-Text Database, US Patent Full-Text Database, EPO Abstracts Database, JPO Abstracts Database

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 6,369,034 B1 (DOHERTY et al) 09 April 2002 (09 04 2002), abstract, claims 1, 2, 3 and 15, col 1, in 12-13 and 35-43, col 8, in 63-65, col 9, in 9-33 and 45, col 10, in 39-42 and col 24, in 61-62</td>
<td>1, 2, 4, 7, 8 and 11</td>
</tr>
<tr>
<td>Y</td>
<td>US 2004/0072850 A1 (KNEGTEL et al) 15 April 2004, (15 04 2004), (paras [01 10] and [0146]) and claims 1 and 22</td>
<td>3, 5, 6, 9, 10 and 12-28</td>
</tr>
<tr>
<td>Y</td>
<td>US 6,096,707 A (HIENO et al) 01 August 2000 (01 08 2000), abstract, col 1, in 50-54 and claim 16</td>
<td>12-28</td>
</tr>
</tbody>
</table>

Further documents are listed in the continuation of Box C

* 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 application or patent 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

Date of the actual completion of the international search
31 July 2007 (31 07 2007)

Date of mailing of the international search report
20 SEP 2007

Name and mailing address of the ISA/US

Mail Stop PCT, Attn ISA/US, Commissioner for Patents
P.O. Box 1450, Alexandria, Virginia 22313-1450
Facsimile No 571-273-3201

Form PCT/ISA/210 (second sheet) (April 2007)

Authorized officer
Lee W Young
PCT Helpdesk 571-272-4300
PCT OIP 571-272-7774
INTERNATIONAL SEARCH REPORT

International application No
PCT/US 06/33819

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  D  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 m this international application, as follows
Two claim groups were found

<table>
<thead>
<tr>
<th>Group</th>
<th>Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 1</td>
<td>1-28</td>
</tr>
<tr>
<td>Group 2</td>
<td>29-61</td>
</tr>
</tbody>
</table>

Group 1) Claims 1-28, having independent claims 1 and 12, are directed to a compound of the formula disclosed in claim 1 The special technical feature being the compound of the formula disclosed in claim 1

Group 2) Claims 29-61, having independent claims 29 and 45, are directed to a compound of the formula disclosed in claim 29 The special technical feature being the compound of the formula disclosed in claim 29

Groups 1-2 represent compounds of distinct general formulas Groups 1-2 do not share a special technical feature that would otherwise provide a unifying contribution over the prior art Therefore, unity, as required by PCT Rule 13 1, is lacking

1  I  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims

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

3  I  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  X  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 1-28

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

Form PCT/ISA/210 (continuation of first sheet (2)) (April 2007)