A61K 31/173 (2006.01) A61K 39/00 (2006.01)
A61K 31/7088 (2006.01) C12N 15/11 (2006.01)
A61K 38/00 (2006.01) A61P 29/00 (2006.01)

Abstract:

Title: TREATMENT OF INFLAMMATORY DISEASES

Inventors; and

 Applicants (for all designated States except US): MEDICAL RESEARCH COUNCIL [GB/GB]; 20 Park Crescent, London W1 1AL (GB). IMPERIAL INNOVATIONS LIMITED [GB/GB]; Imperial College London, Exhibition Road, London SW7 2AZ (GB).

Inventors/Applicants (for US only): COOK, Terence [GB/GB]; 9 Normand Mews, London W14 9RB (GB). BEHMOARAS Jacques [GB/GB]; 48 Trinity Church Road, London SW13 8E1 (GB). AITMAN, Timothy [GB/GB]; 63 Whitehall Park Road, London W4 3NB (GB).


Designated States (unless otherwise indicated, for every kind of regional protection available): ARIP (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

Date of publication of the international search report: 25 June 2009

We describe the involvement of JunD in the activation of macrophages and the association of JunD in inflammatory diseases and conditions.
INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2008/003563

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61K31/713 A61K31/7088 A61K38/00 A61K39/00 C12N15/11
A61P29/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. RELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
A61K C12N A61P

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, BIOSIS, WPI Data, Sequence Search

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
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<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No</th>
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Further documents are listed in the continuation of Box C

See patent family annex

Date of the actual completion of the international search

29 April 2009

Date of mailing of the international search report

12/05/2009

Name and mailing address of the ISA/
European Patent Office, P B 5818 Patentlaan 2
NL-2280 HV Rijswijk
Tel (+31-70) 340-2046
Fax (+31-70) 340-3016

Authorized officer

Vreugde, Sarah

Form PCT/ISA/210 (second sheet) (April 2005)
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<th>Relevant to claim No.</th>
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<td>X</td>
<td>BHOUMIK A ET AL: &quot;Transcriptional switch by activating transcription factor 2-derived peptide sensitizes melanoma cells to apoptosis and inhibits their tumorigenicity&quot; PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE, WASHINGTON, DC; US, vol. 101, no. 12, 23 March 2004 (2004-03-23), pages 4222-4227, XP002286106 ISSN: 0027-8424 page 4222, right-hand column, paragraph 4 page 4226, left-hand column, paragraph 1</td>
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<td>X</td>
<td>EICKELBERG 0 ET AL: &quot;Molecular mechanisms of TGF-beta antagonism by interferon gamma and cyclosporine A in lung fibroblasts&quot; FASEB JOURNAL, FED. OF AMERICAN SOC. FOR EXPERIMENTAL BIOLOGY, BETHESDA, MD, US, vol. 15, 1 March 2001 (2001-03-01), pages 797-806, XP002974751 ISSN: 0892-6638 abstract page 798, left-hand column, paragraph 4</td>
<td>1, 9, 10, 13-15, 25-28, 31-33, 36, 37</td>
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## DOCUMENTS CONSIDERED TO BE RELEVANT

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<td>P, X</td>
<td>WO 2008/109506 A (MDRNA INC [US]; QUAY STEVEN C [US]; MCSWIGGEN JAMES [US]; VAISH NAREND) 12 September 2008 (2008-09-12) page 1, paragraph 1; claims 1, 2 page 11, paragraph 3; claim 5 page 45, paragraph 3 page 52, paragraph 1; claims 23, 24 page 23, paragraph 1</td>
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**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. [ ] 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 No. 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 allsearchable claims.

2. [x] As all searchable claims could be searched without effort justifying an 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.

Form PCT/ISA/210 (continuation of first sheet (2)) (April 2005)
This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1 partially, 2-8, 10 partially, 13-17 partially, 25-42 partially, 44-45 partially
   An agent that inhibits the expression or activity of JunD wherein the agent is an inhibitory RNA, related compounds, methods and uses

2. claims: 1 partially, 9, 10 partially, 13-17 partially, 25-42 partially, 44-45 partially
   An agent that inhibits the expression or activity of JunD wherein the agent is an antisense nucleic acid, related compounds, methods and uses

3. claims: 1 partially, 11 partially, 12, 13-17 partially, 25-42 partially, 44-45 partially
   An agent that inhibits the expression or activity of JunD wherein the agent is a peptide, related compounds, methods and uses

4. claims: 1 partially, 11 partially, 13-17 partially, 25-42 partially, 44-45 partially
   An agent that inhibits the expression or activity of JunD wherein the agent is an antibody, related compounds, methods and uses

5. claims: 18-24
   a method to diagnose a subject suffering from an inflammatory disease or condition

6. claim: 43
   a modelling method to determine the association of an agent with a JunD polypeptide
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<th>Publication date</th>
<th>patent family member(s)</th>
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<tr>
<td>WO 2004043370 A</td>
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