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(54) Title: PROTEINS INVOLVED IN THE REGULATION OF CELL-CELL ADHESION AND USES THEREOF

(57) Abstract

A p100 protein, which has a molecular weight of about 100 kDa and appears to be related to p120, is involved in the regulation of cell-cell adhesion.

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB 95/02686

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 C12N15/12 C12N15/85 C12N5/10 C07K14/47 C07K16/18
C12Q1/00 A61K39/395

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 6 C07K C12N C12Q A61K

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ONCOGENE (1992), 7(12), 2439-45 CODEN: ONCNES;ISSN: 0950-9232, 1992, XP002002165 REYNOLDS, ALBERT B. ET AL: "P120, a novel substrate of protein tyrosine kinase receptors and of p60v-src, is related to cadherin -binding factors.beta.- catenin, plakoglobin and armadillo" cited in the application see abstract see page 2439, right-hand column, paragraph 3 - page 2441, left-hand column, paragraph 3 see page 2444, left-hand column, paragraph 2 --- -/--	1,3-7,12

[X] 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)
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"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.
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Date of the actual completion of the international search	Date of mailing of the international search report
6 May 1996	10. 05. 96
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+ 31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+ 31-70) 340-3016	Authorized officer Montero Lopez, B

Form PCT/ISA/210 (second sheet) (July 1992)

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CELL, vol. 65, no. 5, May 1991, NA US, pages 849-857, XP002002166 AKIRA NAGAFUCHI ET AL.: "The 102 kd Cadherin-associated protein: Similarity to vinculin and posttranscriptional regulation of expression" cited in the application see the summary see page 849, right-hand column, last paragraph - page 850, left-hand column, paragraph 1 see page 851, left-hand column, paragraph 2 - paragraph 3; figure 3 see page 853, left-hand column, paragraph 2 ---	1,3-7,12
A	J. CELL SCI. (1994), 107(8), 2259-70 CODEN: JNCSAI;ISSN: 0021-9533, 1994, XP002002167 HATZFELD, MECHTHILD ET AL: "Band 6 protein, a major constituent of desmosomes from stratified epithelia, is a novel member of the armadillo multigene family" see the summary see page 2262, left-hand column, paragraph 2 - page 2267, left-hand column, paragraph 2 ---	1-7,12
A	PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, vol. 87, no. 9, May 1990, WASHINGTON US, pages 3328-3332, XP002002168 STEVEN B. KANNER ET AL.: "Monoclonal antibodies to individual tyrosine-phosphorylated protein substrates of oncogene-encoded tyrosine kinases" cited in the application see abstract see page 3328, right-hand column, paragraph 2 --- -/--	8

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	J. CELL BIOL. (1995), 130(2), 368-81 CODEN: JCLBA3;ISSN: 0021-9525, 1995, XP002002169 STADDON, JAMES M. ET AL: "P120, a p120 -related protein (p100), and the cadherin / catenin complex" see abstract see page 370, left-hand column, paragraph 3 see page 371, right-hand column, last paragraph - page 372, left-hand column, paragraph 1 see page 371, right-hand column, paragraph 2 - page 374, right-hand column, paragraph 2 see page 379, left-hand column, last paragraph - page 380, right-hand column, paragraph 2 ---	1,2,6,7, 12
P,X	MOLECULAR AND CELLULAR BIOLOGY, vol. 14, no. 12, December 1994, WASHINGTON US, pages 8333-8342, XP000561742 ALBERT B. REYNOLDS ET AL.: "Identification of a new catenin: the tyrosine kinase substrate p120cas associates with E-cadherin complexes" see abstract see page 8334, right-hand column, last paragraph - page 8336, left-hand column, paragraph 1 see page 8341, left-hand column, paragraph 3 -----	6

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB95/02686

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.:
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 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:

- claims 1-5,12 and, partially, 6-11
- claims 6-11 partially

- see next 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 searches 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

- Protein P100, nucleic acid encoding it, vector and host cell containing the same, uses thereof and agent blocking its association to the catenin/cadherin complex

- Use of protein P120 for studying cell-cell adhesion and agent blocking the association of P120 with the catenin/cadherin complex