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Declarations under Rule 4.17:
— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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*

(88) Date of publication of the international search report:
19 July 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: POLYNUCLEOTIDES AND POLYPEPTIDES ASSOCIATED WITH THE NF-kB PATHWAY

PKKKRKVAAVALLPAVLLALLAPKKKRKV (SEQ ID NO:124)

(57) Abstract: The present invention provides polynucleotides encoding NF-kB-associated polypeptides, fragments and homologues thereof. Also provided are vectors, host cells, antibodies, and recombinant and synthetic methods for producing said polypeptides. The invention further relates to diagnostic and therapeutic methods for applying these NF-kB-associated polypeptides to the diagnosis, treatment, and/or prevention of various diseases and/or disorders related to these polypeptides. The invention further relates to screening methods for identifying agonists and antagonists of the polynucleotides and polypeptides of the present invention.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/14279

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8): **C07H 17/00**(2006.01)

USPC: 536/23.1
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)
U.S. : 536/23.1

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)
none

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/086076 (BRISTOL-MYERS SQUIBB COMPANY) 31 October 2002. Only the file front page and sequence alignment is being provided for this 608 page document. Note that SEQ ID NO: 1 is identical to instant SEQ ID NO: 1.	1-5

☐ Further documents are listed in the continuation of Box C. ☐ See patent family 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 application or patent 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

Date of the actual completion of the international search	Date of mailing of the international search report
03 May 2007 (03.05.2007)	23 MAY 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	Authorized officer Karen Cochrane Carlson, Ph.D. Telephone No. 571-272-0700

Form PCT/ISA/210 (second sheet) (April 2005)

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/14279

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:
Please See Continuation 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 searched without effort justifying additional fees, this Authority did not invite payment of any 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.: 1-5

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.

BOX III. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group 1-141, claim(s) 1-5, drawn to polynucleotides having SEQ ID NO: 1-108, 125, 127, 132-140, 158, 159, 264-284, respectively.

Group 142-164, claim(s) 6, 7, drawn to polypeptides having SEQ ID NO: 109-110, 126, 128, 144-152, 160, and 161, respectively.

Group 165-187, claim(s) 8, drawn to antibodies against polypeptides having SEQ ID NO: 109-110, 126, 128, 144-152, 160, and 161, respectively.

Group 188-210, claim(s) 9 and 13, drawn to a method of treatment via the polypeptides having SEQ ID NO: 109-110, 126, 128, 144-152, 160, and 161, respectively.

Group 211-351, claim(s) 10 and 19, drawn to a method for diagnosing disease via polynucleotides having SEQ ID NO: 1-108, 125, 127, 132-140, 158, 159, 264-284, respectively.

Group 352-374, claim(s) 11 and 20, drawn to a method of diagnosing disease via polypeptides having SEQ ID NO: 109-110, 126, 128, 144-152, 160, and 161, respectively.

Group 375-397, claim(s) 12 and 14, drawn to a method for identifying a binding partner for polypeptides having SEQ ID NO: 109-110, 126, 128, 144-152, 160, and 161, respectively.

Group 398-420, claim(s) 15-17, drawn to a method for identifying compounds that alter the biological activity polypeptides having SEQ ID NO: 109-110, 126, 128, 144-152, 160, and 161 in a host cell, respectively.

Group 421, claim(s) 18, drawn to compounds found via the methods of Claims 15-17.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

The inventions listed as Groups 1-421 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group 1 and Group 2, drawn to nucleic acid sequence SEQ ID NO: 1 and SEQ ID NO: 2, respectively, differ in structure. SEQ ID NO: 1 is 588 nucleotides in length while SEQ ID NO: 2 is 678 nucleotides in length. SEQ ID NO: 1 begins with nucleotides GGGACAGTG while SEQ ID NO: 2 begins with nucleotides ATTTCATTA, for example. See all of the sequences in Table II beginning at page 437 of the specification. Therefore, Group 2 lacks the same or corresponding special technical features of Group 1. This application contains the following inventions or groups of inventions

which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.