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[Continued on next page]

(54) Title: RECOMBINANT BONE MARROW STROMAL ANTIGEN-2 IN THE TREATMENT OF AUTOIMMUNE DIS-
EASES

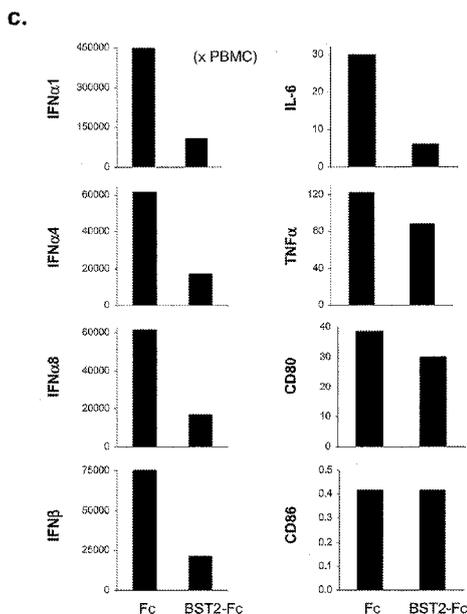


FIG. 4C

(57) Abstract: Methods, compositions and kits are disclosed for in-
hibiting interferon production and modulating immune responses,
particularly an autoimmune response. In certain embodiments, the
methods involve administering an effective amount of a BST2 pro-
tein or a nucleic acid encoding an BST2 protein to treat an autoim-
mune disease or disorder.

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- *with international search report (Art. 21(3))*
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— *with sequence listing part of description (Rule 5.2(a))*

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2009/066246**A. CLASSIFICATION OF SUBJECT MATTER***G01N 33/53(2006.01)i, G01N 33/68(2006.01)i*

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)

G01N 33/53; C07K 16/00; C12N 15/09

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models
Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal), Delphion, NCBI BLAST, PubMed, CA "(bone marrow stromal antigen 2 OR BST2 OR CD317 OR HMI.24 OR tetherin) AND (autoimmune OR interferon OR IFN OR lupus)"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	BLASIUS, A. L. et al. "Bone Marrow Stromal Cell Antigen 2 Is a Specific Marker Type I IFN-Producing Cells in the Naive Mouse, but a Promiscuous Cell Surface Antigen Following IFN Stimulation" J. Immunol., Sep. 2006, Vol.177, No.5, Pages 3260-3265 See the Whole Document	19-23
A	KAWAI, S. et al. "Interferon-alpha Enhances CD317 Expression and the Antitumor Activity of Anti-CD317 Monoclonal Antibody in Renal Cell Carcinoma Xenograft Models" Cancer Sci., 20 Nov. 2008, Vol.99, No.12, Pages 2461-2466 See the Whole Document	19-23
A	EP 1767625 A1 (GINKGO BIOMEDICAL RESEARCH INSTITUTE CO., LTD.) 28 March 2007 See the Whole Document	19-23
A	WO 2008-127261 A1 (ISU ABXIS CO., LTD et al.) 23 October 2008 See the Whole Document	19-23

 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 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 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

26 JULY 2010 (26.07.2010)

Date of mailing of the international search report

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2009/066246**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.: 1-18
because they relate to subject matter not required to be searched by this Authority, namely:
The subject matter of claims 1-18 pertains to method for treating human disease, thus relates to a subject matter which this International Searching Authority is not required, under Article 17(2)(a)(i) of the PCT and Rule 39.1(iv) of the Regulations under the PCT to search.
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:

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 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 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.

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1767625 A1	28.03.2007	CA 2570602-A1	26.01.2006
		EP 1767625 A4	05.12.2007
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