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(71) Applicant (*for all designated States except US*): **TADEKA CHEMICAL INDUSTRIES, LTD.** [JP/JP]; 1-1, Doshomachi 4-chome, Chuo-ku, Osaka-shi, Osaka 541 (JP).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **HENSEL, Chuck** [US/US]; 320 Wakara Way, Salt Lake City, Utah 84108 (US). **SAKAMOTO, Takeshi** [JP/JP]; New Marunouchi Bldg., 5-1, 1-chome, Chiyoda-ku, Tokyo (JP).

(74) Agent: **REES, Dianne, M.**; Edwards & Angell LLP, P.O. Box 55874, Boston, MA 02205 (US).

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Published:

- with international search report
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29 June 2006

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: AW755252-INTERACTING PROTEINS AND USE THEREOF

(57) Abstract: Protein complexes are provided comprising AW755252 and one or more proteins selected from the group consisting of GROUP1. Methods of using the protein complexes in diagnosing diseases and disorders are also provided. In addition, the protein complexes are also useful in screening assays for identifying compounds effective in treating and/or preventing diseases and disorders associated with AW755252 and its interactors.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/26997

A. CLASSIFICATION OF SUBJECT MATTER

IPC: C07K 5/00(2006.01);A61K 39/395(2006.01)

USPC: 530/350;424/130.1

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. : 530/350; 424/130.1

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 practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01/92567 A2 (MEDIGENE AG.) 06 December 2001. See esp. p. 8, lines 6-11; p. 11, lines 1-12; p. 16, whole page; p. 18, 6-17; p. 30, lines 26-30; p. 35, lines 14-15 and Figures 2C-2D. The claims are written in such a way that the binding of a second protein to the AW755252 (or homologue) is a property inherent to it. Claims did not recite a fusion protein. Method claims and claim 113 escape prior art because they are drawn to modulation of the interaction between two proteins.	1-34, 64-81, 112-129



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	"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
"B" earlier application or patent published on or after the international filing date	"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
"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)	"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
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"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

27 March 2006 (27.03.2006)

Date of mailing of the international search report

12 MAY 2006

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner of Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (571) 273-3201

Authorized officer

Christina Borgest

Telephone No. 571-272-1600

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/26997

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claim Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claim 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. ☐ Claim 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:
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 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.

INTERNATIONAL SEARCH REPORT

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BOX II. 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 I, claim(s) 1-20, 23-30, 64-81, 112, 115, 126-129 are drawn to an isolated protein, nucleic acid, expression vectors, host cells and kits, and methods of making the protein.

Group II, claim(s) 21-22, 31, 32, 114 are drawn to antibodies specific to protein of Group I.

Group III, claim(s) 33-34 are drawn to a protein microarray.

Group IV, claim(s) 35, 116-125 are drawn to a method of detecting a protein complex and/or diagnosing a physiological disorder.

Group V, claim(s) 36-63, 87-91 are drawn to screening for modulators of a protein complex.

Group VI, claim(s) 82-86, 92-111 are drawn to methods of administering a compound that modulates activity of a protein complex.

Group VII, claim(s) 113, drawn to a pharmaceutical composition comprising AW755252 and a protein selected from the group consisting of MFHL2, mPN34854, mPRPH1, mTCTEX-1, ACTN2, mACTN4 and mMRJ.

The inventions listed as Groups I-VIII 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: Claim 1 is anticipated by WO 01/92567 (published 6 December 2001), thus lacks a special technical feature.

INTERNATIONAL SEARCH REPORT

PCT/US03/26997

Continuation of B. FIELDS SEARCHED Item 3:

WEST, MEDLINE

search terms: AW755252