



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification ⁷ : C12N 15/19, 15/00, 1/00, 15/09, 15/24, 15/03, 15/74, 15/63, C07K 14/52, 14/54, 1/00, 16/24, C12Q 1/68, G01N 33/53, 33/50, A61K 38/19, 38/20, 38/00, 39/00</p>	<p>A3</p>	<p>(11) International Publication Number: WO 00/08045</p> <p>(43) International Publication Date: 17 February 2000 (17.02.00)</p>
<p>(21) International Application Number: PCT/US99/17886</p> <p>(22) International Filing Date: 6 August 1999 (06.08.99)</p> <p>(30) Priority Data: 09/131,263 7 August 1998 (07.08.98) US</p> <p>(71) Applicant: MILLENNIUM BIOTHERAPEUTICS, INC. [US/US]; 620 Memorial Drive, Cambridge, MA 02139 (US).</p> <p>(72) Inventor: PAN, Yang; 6 Hamilton Road #1, Brookline, MA 02146 (US).</p> <p>(74) Agent: MEIKLEJOHN, Anita, L.; Fish & Richardson, P.C., 225 Franklin Street, Boston, MA 02110-2804 (US).</p>	<p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report.</i></p> <p>(88) Date of publication of the international search report: 2 June 2000 (02.06.00)</p>	
<p>(54) Title: NOVEL MOLECULES OF THE TANGO-93-RELATED PROTEIN FAMILY AND USES THEREOF</p> <p>(57) Abstract</p> <p>Novel TANGO-93 polypeptides, proteins, and nucleic acid molecules are disclosed. In addition to isolated, full-length TANGO-93 proteins, the invention further provides isolated TANGO-93 fusion proteins, antigenic peptides and anti-TANGO-93 antibodies. The invention also provides TANGO-93 nucleic acid molecules, recombinant expression vectors containing a nucleic acid molecule of the invention, host cells into which the expression vectors have been introduced and non-human transgenic animals in which a TANGO-93 gene has been introduced or disrupted. Diagnostic, screening and therapeutic methods utilizing compositions of the invention are also provided.</p>		

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/17886

A. CLASSIFICATION OF SUBJECT MATTER
 IPC(7) :Please See Extra Sheet.
 US CL :Please See Extra Sheet.
 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. : 435/69.5, 69.52, 69.1, 6, 7.1, 7.2, 252.3, 320.1; 536/23.5; 520/351, 350, 389.2, 388.23, 424/85.1, 85.2; 514/2, 12

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)
 Database Sequence search of Seq ID No's 1-6.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P ---- Y,P	WO 9847921 A1 (SCHERING CORPORATION) 29 October 1998 (29.10.98), see the abstract, figures, sequences and claims.	1-22 ----- 1-22
X ---- Y	Database EST-STS on MASPARG search, WashU-HHMI EST Project (St. Louis, MO., USA), No. W20594, MARRA et al., 'mc16c06.r1 Soares mouse p3NMF19.5 Mus Musculus cDNA clone IMAGE:348682 5', mRNA sequence', see sequence alignment.	1-4 ----- 1-7, 12
X --- Y	Database EST-STS on MASPARG search, WashU-HHMI EST Project (St. Louis, MO, USA) No. W08205, MARRA et al., 'mb49b11.r1 Soares mouse p3NMF19.5 Mus musculus cDNA clone antagonist-mouse, mRNA sequence', see sequence alignment.	1-4 ----- 1-7, 12

Further documents are listed in the continuation of Box C. See patent family annex.

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Date of the actual completion of the international search 02 FEBRUARY 2000	Date of mailing of the international search report 10 FEB 2000
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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.
Y	US, A 5,455,330 (HASKILL ET AL) 03 OCTOBER 1995 (03.10.95), see figures 1-2, col. 3-15, 19, and claim.	1-22

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G01N 33/53, 33/50; A61K 38/19, 38/20, 38/00, 39/00

A. CLASSIFICATION OF SUBJECT MATTER:

US CL :

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