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(54) Title: SCREENING ASSAYS FOR IDENTIFYING DIFFERENTIATION-INDUCING AGENTS AND PRODUCTION OF DIFFERENTIATED CELLS FOR CELL THERAPY

(57) Abstract: The invention relates to assays for screening growth factors, adhesion molecules, immunostimulatory molecules, extracellular matrix components and other materials, alone or in combination, simultaneously or temporally, for the ability to induce directed differentiation of pluripotent and multipotent stem cells.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/26945

A. CLASSIFICATION OF SUBJECT MATTER
 IPC(7) : C12Q 1/02; C12N 5/00;
 US CL : 435/29, 325, 375, 377, 402
 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. : 435/29, 325, 375, 377, 402

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)
 EAST, CHEMICAL ABSTRACTS, BIOSIS, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GRABEL, L. et al. Using EC and Es Cell Culture to Study Early Development: Recent Observations on Indian Hedgehog and Bmps. International Journal of Developmental Biology. 1998, Vol. 42, pp. 917-925.	1-84
A	BEHRENDTSEN, O. et al. Metalloproteinases Regulate Parietal Endoderm Differentiating and Migrating in Cultured Mouse Embryos. Developmental Dynamics. 1997, Vol. 208, pp. 255-265.	1-84
A	YUEN, D. et al. Generation of a Primitive Erythroid Cell Line and Promotion of its Growth by Basic Fibroblast Growth Factor. Blood. 01 May 1998, Vol. 91, No. 9, pp. 3202-3209.	1-84
A	ANZAI, H. et al. Self-Renewal and Differentiation of a Basic Fibroblast Growth Factor-Dependent Multipotent Hematopoietic Cell Line Derived from Embryonic Stem Cells. Development, Growth and Differentiation. 199, Vol. 41, pp. 51-58.	1-84

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

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INTERNATIONAL SEARCH REPORT

C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	WIRL, G. et al. Mammary Epithelial Cell Differentiation In Vitro is Regulated by an Interplay of EGF Action and Tenascin-C Downregulation. <i>Journal of Cell Science</i> . 1995, Vol. 108, 2445-2456.	1-84
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A	SUZUKI, T. et al. Preferential Differentiation of P19 Mouse Embryonal Carcinoma Cells Into Smooth Muscle Cells. <i>Circulation Research</i> . 1996, Vol. 78, pp. 395-404.	1-84
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