

**Recent patent applications in stem cell research**

Patent #	Subject	Assignee(s)	Inventor(s)	Priority application date	Publication date
WO 200617855	A method of regulating cell function of a stem cell, involving causing the $\beta$ 1,4-galactosyltransferase (GalT)-associated protein (GTAP)-mediated ubiquitination of membrane proteins, signaling proteins and cell cycle-regulating proteins in the cell, where cell functions such as survival, growth, adhesion and differentiation of the stem cell are altered.	Geng Y, University of Texas System (Austin, TX, USA), Wassler, MJ	Geng Y, Wassler MJ	8/12/2004	2/16/2006
WO 200617567	A method of inducing or modifying rhythmic electrical or contractile activities of <i>in vivo</i> cardiac tissue by integrating electrically active donor cardiomyocytes derived from genetically engineered embryonic stem cells into recipient cardiomyocytes of <i>in vivo</i> cardiac tissue to achieve a preferred therapeutic outcome.	Johns Hopkins University (Baltimore, MD, USA)	Akar FG, Cho H, Li RA, Marban E, Tomaselli G	8/2/2004	2/16/2006
WO 200617370	A commercial product for culturing human embryonic stem (hES) cells <i>in vitro</i> such that they proliferate without differentiating, comprising a medium, or one or more components that when combined, form(s) a medium in which to culture the hES cells, where the medium comprises an isotonic buffer, a protein nutrient, lipids, fatty acids, or cholesterol, and added fibroblast growth factor at a concentration of at least 40 ng/ml.	Geron (Menlo Park, CA, USA)	Lebkowski JS, Li Y, Mandalam R, Xu C	3/1/2005	2/16/2006
WO 200617320	<i>In vitro</i> production of myocytes for treating cardiovascular diseases, involving isolating myogenic stem cells from mammalian adipose tissue, culturing isolated cells in a medium that favors myogenic development and harvesting the myocytes.	Geng Y, University of Texas System (Austin, TX, USA), Willerson, JT	Geng Y, Madonna R, Willerson, JT	7/13/2004	2/16/2006
JP 2006042758	A base material for culturing embryonic stem cells and inducing differentiation of embryonic stem cells to hepatocytes, comprising a crosslinked polysaccharide sponge as a main component.	Seikagaku Kogyo (Tokyo)	Asari A, Ochitani T, Teratani T	7/2/2004	2/16/2006
JP 2006042665	A CD45 negative hematopoietic stem cell composition having CD45 negativity, CD34 negativity and Lineage antigen negativity. The composition accurately detects CD45 negative hematopoietic stem cells, and reliably and rapidly diagnoses myelodysplastic syndrome.	Nippon Medical School (Tokyo)	Ogata K, Sato C, Tsuji T	8/4/2004	2/16/2006
JP 2006042663	A method of producing a marker capable of identifying an embryonic stem cell and embryonic carcinoma cell, comprising providing a component derived from the cell, carrying out a gel shift assay using the component and specific factors for Oct4 and Sox2 and selecting the cell in which the component shows a super shift in gel shift assay using Oct4 specific factor but not with Sox2 specific factor.	Reprosel KK (Kyoto, Japan), Kyoto University	Nakatsuji N, Tada M, Tada T	8/3/2004	2/16/2006
WO 200616353	The use of elastase inhibitor for manufacturing a medicament for treating leukemia, assisting hematopoietic stem cell autotransplantation, separating normal hematopoietic stem cells from leukemic cells or preventing or inhibiting the migration and/or proliferation of leukemic cells.	Yeda Research & Development Co. (Rehovot, Israel)	Lapidot T, Petit I, Tavor S	8/10/2004	2/16/2006
WO 200613159	A method for the isolation and culture of stem cells, especially neural stem cells from vertebrate tissue. Stem cells are selected from a single-cell suspension of the vertebrate tissue. The selection uses at least one primary agent which can bond with the DSD-1 epitope, with DSD-1-PG, with phosphacan, with receptor protein tyrosine phosphatase beta/zeta (RPTP beta/zeta) and/or another transmembrane protein showing DSD-1 epitope.	Ruhr University Bochum (Bochum, Germany)	Faissner A, Holst AV, Sirko S	7/31/2004	2/9/2006
WO 200615209	A pluripotent stem cell containing a nucleic acid segment, where the nucleic acid segment comprises the structure P-I, where P is a transcriptional control element and I is a sequence encoding a marker, where the marker comprises a transformation agent; useful for assaying a composition or compound for toxicity or an effect of interest on a cell, and for treating diseases, for example, liver diseases.	Amphioxus Cell Technologies (Houston, TX, USA)	Kelly JH	7/29/2004	2/9/2006
WO 200615127	A method of treating cardiovascular tissue, involving administering stem cells to the cardiovascular tissue under conditions where the stem cells do not develop tumor cells in cardiovascular tissue.	Mayo Foundation for Medical Education and Research (Rochester, MN, USA)	Behfar A, Terzic A	5/12/2005	2/9/2006

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