

## RESOURCES

## PATENTS

## Recent patents in stem cell research

Patent #	Subject	Assignee	Author	Date	Status
WO 9858963	Preparation of large amounts of human monoclonal antibodies by transplanting a human stem cell into a first and second animal embryo, and injecting the first embryo with antigen and the second embryo with cells from first embryo.	Wengler GS	Wengler GS	12/30/98	A1
US 5851832	Culture of mammalian neural cells enriched with multipotent neural stem cells in vitro, for the production of differentiated neural cells.	Neurospheres Ltd. (Calgary, Alberta, Canada)	Baetge EE, Hammang JP, Reynolds B, Weiss S	12/22/98	A
US 5849553	Transforming neural crest stem cells with a vector containing an immortalized gene flanked by recombinase target sites, for the production of an immortalized cell line. Cells can be used for transplantation, for the production of monoclonal antibodies, and to grow smooth muscle cells.	Cal. Inst. Technol. (Pasadena, CA)	Anderson DJ, Stemple DL	12/15/98	A
WO 9854225	Monoclonal antibodies compatible with humans, specific for human CD28 and capable of nonantigen specifically activating T-lymphocytes; used in the treatment of diseases with a pathologically low CD4 T-cell number, especially AIDS or after stem cell transplantation or chemotherapy.	Huenig T	Hanke G, Hanke T, Huenig T, Rodriguez-Palermo M, Tacke M, Hara T	12/3/98	A2
WO 9851781	Transgenic mice expressing nonnative presenilin-1 mutant or allele, and associated methods to target mouse embryonic stem cells, to provide a model system to study the etiology of familial Alzheimer's disease.	Merck & Co. (Whitehouse Sta., NJ); Johns Hopkins Univ. (Baltimore, MD)	Jiang P, Qian S, Sisodia SS, van der Ploeg LHT, Wong PC, Zheng H	11/19/98	A1
US 5837507	Stem cell transduced to express HOX gene able to form pluripotent cells, especially for producing expanded cell populations for bone marrow reconstitution without the risk of leukemia, or as carriers for therapeutic genes.	Humphries K; Sauvageau G; Univ. California (Oakland, CA)	Humphries K, Largman C, Lawrence HJ, Sauvageau G	11/17/98	A
WO 9848001	Production of neurons or smooth muscle cells, by contacting at least one mammalian neural stem cell with a growth factor, especially transforming growth factor.	Cal. Inst. Technol. (Pasadena, CA)	Anderson DJ, Shah NM	10/29/98	A1
WO 9846726	Transgenic nonhuman animal or stem cell with a disrupted A-myb locus in the genome; useful as a model for male infertility and for studying spermatogenesis.	Temple Univ. (Philadelphia, PA)	Hatton K, Reddy EP, Toscani A	10/22/98	A1
WO 9846733	Preparation of transgenomic embryonic stem cell with a whole heterologous chromosome to produce a transgenic organism; comprises tagging the chromosome with a dominant marker, inducing microcell formation, and fusing microcells with embryonic cells.	Imperial Coll. Sci., Technol. & Med. (London)	Fisher E, Hernandez D, Martin J, Mee J, Tybulewicz V	10/22/98	A1
WO 9845326	Polynucleotides encoding stem cell zinc fingers; useful for gene therapy to replace or supplement defective gene for those proteins.	Osiris Therapeutics (Cleveland, OH)	Civin CI, Liu C, Small D	10/15/98	A1
WO 9842838	Production of cells expressing a heterologous histocompatibility allele by deleting regions of the histocompatibility gene complex and replacing them with a polynucleotide encoding a heterologous allele; useful for preparing cells having a preselected expression of MHC antigens.	Morphogenesis Inc. (Alachua, FL)	Lawman MJP, Lawman P	10/1/98	A1
WO 9842356	In vitro elimination of tumor cells from hematopoietic cells (specifically enriched in stem cells) by labeling, recording an image, and directing a laser beam to individual labeled cells, particularly bone marrow cells; treated cells can be reintroduced into a patient, e.g., in the treatment of cancer.	Palsson, BO	Palsson, BO	10/1/98	A1
EP 867720	Counting hematopoietic progenitor cells using flow cytometry without the use of antibodies; used to monitor the mobilization of stem cells for use in peripheral blood stem cell transplantation (e.g., for treating chemotherapy and/or radiotherapy patients).	Toa Medical Electronics Co (Japan)	Hamaguchi Y, Houwen B, Ikeuchi Y, Morikawa T, Tsujino Y	9/30/98	A1
WO 9840468	Production of selected cell lines or transgenic animals by introducing a vector with a selectable marker into an embryonic stem cell gene, so that expression of the gene is inhibited.	Vanderbilt Univ. (Nashville, TN)	Hicks GG, Ruley HE	9/17/98	A1

Source: Derwent Information, Alexandria, VA. \*The patents in the table are pending. The status of each application is slightly different from country to country. For further details, contact Derwent Information, 1725 Duke St., Suite 250, Alexandria, VA 22314. Tel: 1 (800) DERWENT (info@derwent.com).