

PATENTS

Recent patents in green fluorescent protein research

Patent #	Subject	Assignee	Author	Date	Status
DE 19833476	Genetically modified, adherently growing CD34-negative stem cells for the transfer of gene therapy constructs for treatment of immunodeficiency and metabolic disorders. CD34-negative stem cells exhibit high transfection and infection efficiencies. Transfection of fibroblast-like CD34-negative stem cells with a green fluorescent protein construct by the lipofectamine method resulted in 47% GFP-positive cells with less than 5% dead cells.	Huss R	Huss R	1/27/2000	A1
WO 200002997	Genetic constructs comprising a human glial fibrillary acidic protein (GFAP) promoter (providing glial cell-specific GFAP expression) and humanized green fluorescent protein (GFP) for transfer into mammalian zygotes; useful for producing transgenic animals, especially mice, for improved assays for physical and neurotoxic damage to the nervous system, since the GFP can be easily visualized and GFAP is known to be upregulated following central nervous system damage.	Wisconsin Alumni Res. Foundation (Madison, WI)	Messing A, Murphy CJ, Zhuo L	1/20/2000	A2
EP 969284	A fluorogenic conjugate for intracellular fluorescence labeling, especially for performing fluorescence resonance energy transfer (FRET) assays in living cells; can be used to measure intracellular levels of a fusion protein of a fluorescent protein (e.g., green fluorescent protein) by FRET if the targeting component targets a sequence of the fusion protein.	Antz C; Paysan J	Antz C, Paysan J	1/5/2000	A1
WO 9966032	Genetically modified mammalian cells for testing substances for their effect in cells, especially for gene control or tissue engineering, are modified with a fluorescent protein expressing gene (preferably GFP or humanized GFP), in which the signal of the fluorescent protein is at least 100 times higher than the auto-fluorescence of the cells.	Ecole Polytechnique Federale Lausanne (France)	Jordan M, Wurm FM	12/23/1999	A2
WO 9965450	New isolated calcineurin-binding (Cabin 1) polypeptides, used as immunosuppressive agents for treating, e.g., immune-related conditions. The Cabin 1 polypeptides are capable of inhibiting calcineurin function such as protein phosphatase activity, and are capable of inhibiting transcriptional activation of calcineurin responsive elements.	Massachusetts Inst. of Technology (Cambridge, MA)	Liu JO, Sun L, Youn H	12/23/1999	A2
WO 9966324	Novel bioluminescence resonance energy transfer (BRET) system comprising a bioluminescence protein (BP) that has luciferase activity, an acceptor fluorophore (GFP), and a substrate to activate the luciferase activity of BP; can be used in drug discovery, drug screening, functional genomics, toxicology, diagnosis, and genotoxicity.	Johnson CH; Joly E; Piston DW	Johnson CH, Joly E, Piston DW	12/23/1999	A2
WO 9964592	New functional engineered green fluorescent proteins that show reversible changes in fluorescence over physiological pH ranges; used for measuring the pH in biological samples and cells, and to produce transgenic animals.	Regents of the Univ. of California (Berkeley, CA); Oregon St. Univ. (Corvallis, OR)	Llopis J, Tsien RY, Wachter RM	12/16/1999	A2
WO 9961472	New cytomegalovirus promoter mutants made by transfecting cells with a combinatorial library of modified CMV promoters ligated into a GFP expression vector. The mutants enhance the duration or intensity of expression of a desired gene in the presence of one or more cytokines	Valentis Inc. (Burlingame, CA)	Freimark B	12/02/1999	A1
CA 2255460	Design of antibiotics for the inhibition of microorganism cell division comprising testing for compounds which block the s-adenosylmethionine (SAM)-dependent step of crosswall formation during cell division; the method for screening compounds for their ability to inhibit the SAM-dependent step includes producing filaments in metK cells carrying a fstZ-green fluorescent protein fusion.	Newman EB	Newman EB	6/15/1999	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).