

Title (en)

ISOLATED LINEAGE NEGATIVE HEMATOPOIETIC STEM CELLS AND METHODS OF TREATMENT THEREWITH

Title (de)

NEGATIVE HÄMATOPOIETISCHE STAMMZELLEN MIT ISOLIRTER LINIERUNG SOWIE BEHANDLUNGSVERFAHREN DAMIT

Title (fr)

CELLULES SOUCHES HEMATOPOIETIQUES DE LIGNEES NEGATIVES ISOLEES ET METHODES DE TRAITEMENT ASSOCIEES

Publication

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Application

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Priority

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Abstract (en)

[origin: MX2007002639A] Isolated, mammalian, adult bone marrow-derived, lineage negative hematopoietic stem cell population (Lin HSCs) contain endothelial progenitor cells (ECPs) capable of rescuing retinal blood vessels and neuronal networks in the eye. Preferably at least about 20% of the cells in the isolated Lin HSCs express the cell surface antigen CD31. The isolated Lin HSC populations are useful for treatment of ocular vascular diseases and to ameliorate cone cell degeneration in the retina. In a preferred embodiment, the Lin HSCs are isolated by extracting bone marrow from an adult mammal; separating a plurality of monocytes from the bone marrow; labeling the monocytes with biotin-conjugated lineage panel antibodies to one or more lineage surface antigens; removing of monocytes that are positive for the lineage surface antigens from the plurality of monocytes, and recovering a Lin HSCs population containing EPCs. The isolated Lin HSCs also can be transfected with therapeutically useful genes. The treatment may be enhanced by stimulating proliferation of activated astrocytes in the retina using a laser.

IPC 8 full level

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