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(54) **Title:** CULTURE MEDIA FOR MULTIPOTENT STEM CELLS

REAGENTS	COMPONENT RANGES	A SAMPLE EMBODIMENT
SERUM FREE MEDIUM	BALANCE TO 100% VOL	BALANCE TO 100% VOL
SERUM	0.1 ~ 50% VOL	~ 10% VOL
FIBROBLAST GROWTH FACTOR	1 pg/mL ~ 100 ng/mL	1 ~ 10 ng/mL
EPIDERMAL GROWTH FACTOR	1 pg/mL ~ 100 ng/mL	1 ~ 10 ng/mL
HYDROCORTISONE	1 pg/mL ~ 100 μg/mL	10 ~ 100 ng/mL
CALCIUM CHLORIDE	1 nM ~ 100 mM	0.01 ~ 0.1 mM
INSULIN	1 ng/mL ~ 100 mg/mL	0.5 ~ 5 mg/mL
PITUITARY EXTRACT	1 pg/mL ~ 100 mg/mL	10 ~ 100 μg/mL
L-CYSTEINE OR GLUTATHIONE	1 nM ~ 100 mM	0.5 ~ 5 mM
SELENIUM	1 pg/mL ~ 100 mg/mL	0.1 ~ 1 μg/mL
STROMAL CELL-DERIVED FACTOR	1 pg/mL ~ 100 ng/mL	1 ~ 10 ng/mL
SODIUM PYRUVATE	1 ng/mL ~ 100 mg/mL	2 ~ 20 mg/mL
TRANSFERRIN	1 ng/mL ~ 100 mg/mL	0.1 ~ 1 mg/mL

FIG. 1

(57) **Abstract:** A growth medium for culturing mesenchymal stem cells. The medium comprises a serum, a fibroblast growth factor, and either an L-cysteine, a glutathione, or an N-acetyl cysteine. Optionally, the medium can comprise various quantities of an epidermal growth factor, a hydrocortisone, a calcium chloride, an insulin, a pituitary extract, a selenium, a stromal-derived factor, a sodium pyruvate, a transferrin, and serum-free medium.