

Materials List for

Isolation and Culture of Three Kinds of Umbilical Cord Mesenchymal Stem Cells

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Materials

Name	Company	Catalog Number	Comments
Adipogenic differentiation kit	Gibco	A1007001	Multidirectional differentiation
Alizarin red staining solution	Sigma	A5533	Multidirectional differentiation
Antibody against CD13	Thermo Fisher Scientific	MA1-12034	flow analysis
Antibody against CD34	BD Biosciences	560942	flow analysis
Antibody against CD45	BD Biosciences	561865	flow analysis
Antibody against CD73	BD Biosciences	940294	flow analysis
Antibody against HLA-DR	BD Biosciences	555560	flow analysis
Anti-fluorescence quenching agent	Abcam	AB103748	Immunofluorescence
Anti-Mouse IgG H&L (Alexa Fluor 488)	abcam	ab150113	Multidirectional differentiation
ATRA	STEMCELL Technologies	302-79-4	cell culture
bFGF	Gibco	13256029	Multidirectional differentiation
BSA	Sigma	V900933	Immunofluorescence
Cell incubator	Thermo Fisher Scientific	HERAcell 240i	cell culture
Cell-counting kit-8	Dojindo	CK04	cell proliferation
Centrifuge	Thermo Fisher Scientific	Sorvall™ MTX-150	cell culture
DAPI	Sigma	10236276001	Immunofluorescence
DMSO	Sigma	D1435	cell culture
FBS	Gibco	10099141	cell culture
FITC Mouse Anti-Human IgG	BD Biosciences	560952	flow analysis
Flow Cytometer	Thermo Fisher Scientific	A24864	flow analysis
Fluorescence microscope	Thermo Fisher Scientific	IM-5	flow analysis
Gelatin	Sigma	48722	Multidirectional differentiation
Leica Microscope	Leica	DM500	Multidirectional differentiation
LG-DMEM medium	Gibco	11-885-084	cell culture
Microplate reader	Thermo Fisher Scientific	A51119500C	cell proliferation

Neurogenic induction	Gibco	A1647801	Multidirectional differentiation
Oil red O solution	Sigma	O1516	Multidirectional differentiation
Osteogenic induction	Cyagen	HUXXC-90021	Multidirectional differentiation
Paraformaldehyde	Sangon Biotech	30525-89-4	Immunofluorescence
Pasteur pipette	Biosharp	BS-XG-03L	cell culture
PBS (phosphate buffered saline)	Hyclone	SH30256.LS	cell culture
Penicillin streptomycin	Hyclone	SV30010	cell culture
Primary antibody against NSE	Santa Cruz Biotechnology	sc-292097	Multidirectional differentiation
SPSS 22.0	IBM	SPSS 22.0	Statistical analysis
The cell climbing sheets	CITOTEST Scientific	80346-0910	Multidirectional differentiation
TritonX-100	Sangon Biotech	9002-93-1	Immunofluorescence
Trypsin	Gibco	25300120	cell culture