

Materials List for

Generation of Mesenchymal Stem Cells from Human Umbilical Cord Tissue and their Differentiation into the Skeletal Muscle Lineage

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jove.com/video/63725

Materials

Name	Company	Catalog Number	Comments
4',6-diamidino-2-phenylindole (DAPI)	Thermo Fisher Scientific	D1306	
Amphotericin B	Sigma Aldrich	A2411	
Antibiotic solution 100x Liquid, endotoxin tested (10,000 U Penicillin and 10 mg Streptomycin/mL in 0.9% normal saline)	HiMedia	A001A-50mL	
Anti-GAPDH antibody	Sigma Aldrich	G8795	
Anti-MyHC antibody (My32)	Novus Biologicals	NBP2-50401AF647	
Anti-MyoD antibody (5.8A)	Novus Biologicals	NB100-56511	
Anti-Myogenin antibody (Clone F5D)	Novus Biologicals	NBP2-34616AF594	
Anti-Pax7 antibody	DSHB	DSHB-C1-576	
APC Mouse anti-human CD90 clone 5E10	BD Biosciences	559869	
Collagen Type 1	Merck	C8919	
D (+) Glucose	Sigma Aldrich	G7021	
Dexamethasone	SIGMA	D4902	
FACSCanto II or FACSAria III	BD Biosciences		
Fetal Bovine Serum, qualified Brazil	GIBCO	10270106	not to be heat-inactivated
FITC Mouse anti-human CD106 clone 51-10C9	BD Biosciences	551146	
FITC Mouse anti-human CD14 clone M5E2	BD Biosciences	557153	
FITC Mouse anti-human CD31 clone WM59	BD Biosciences	557508	
FITC Mouse anti-human CD34 clone 581	BD Biosciences	555821	
FITC Mouse anti-human CD45 clone HI30	BD Biosciences	555482	

FITC Mouse anti-human CD49D clone 9F10	BD Biosciences	560840	
FITC Mouse anti-human CD90 clone 5E10	BD Biosciences	555595	
FITC Mouse anti-human HLA-A,B,C clone G46-2.6	BD Biosciences	557348	
FITC Mouse anti-human IgG clone G18-145	BD Biosciences	555786	
FlowJo software	BD Biosciences		
Gentamicin	Sigma Aldrich	G1264	
Horse serum	HiMedia	RM1239	
Hydrocortisone	Merck	H4001	
Laminin	Merck	L2020	
MEM Alpha Modification without L-glutamine, ribo- and deoxyribonucleosides	Hyclone	SH30568.FS	Basal medium for uMSCs
PE Mouse anti-human CD105 clone 266	BD Biosciences	560839	
PE Mouse anti-human CD44 clone 515	BD Biosciences	550989	
PE Mouse anti-human CD49E clone IIA1	BD Biosciences	555617	
PE Mouse anti-human IgG clone G18-145	BD Biosciences	555787	
PE-Cy7 Mouse anti-human CD73 CLONE AD2	BD Biosciences	561258	
Phosphate buffered saline (PBS), pH=7.4	HiMedia	M1866	
Trypsin/EDTA solution (1x 0.25% Trypsin and 0.02% EDTA in Hanks Balanced Salt Solution (HBSS))	HiMedia	TCL049-100mL	