

Primary Culture of Dental Pulp Stem Cells

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Materials

Name	Company	Catalog Number	Comments
6 well cell culture plate	Costar	3516	For cell culture
Alcian blue stain	EZstain chondrocyte staining kit, HiMedia	CCK029	
alizarin red S stain	Sigma-Aldrich	TMS-008	Osteogenic stain
Antibiotic cocktail	Himedia	A002-5X50ML	To prevent culture contamination
Ascorbic Acid	Himedia	TC094-25G	Chondrogenic induction
B27 supplement	Gibco	17504044	For neural induction
bFGF (basic Fibroblast Growth Factor)	Gibco	PHG0024	For neural induction
CD 105	BD-Pharmingen	560839	
CD 35	Biologend	343604	
CD 45	Biologend	304006	
CD 73	Biologend	344016	
CD 90	Biologend	328107	Characterization
cetyl pyridinium chloride (CPC)	Sigma-Aldrich	1104006	For Alizarin Red extraction
Dexamethasone 21-phosphate disodium	Sigma-Aldrich	D1159-100MG	
Dulbecco's Phosphate Buffered Saline	Himedia	TS1006-5L	For washing purpose
EGF (Epidermal Growth Factor)	Gibco	PHG0311	For hepatic and neural induction
EVOS LED microscope	Invitrogen		For fluorescence imaging
EZ stain Chondrocyte staining kit	Himedia	CCK029-1KT	Chondro stain Kit
FACS Canto flow cytometer	BD Biosciences		For cell characterization
Fetal Bovine Serum	Gibco	16000044	For primary culture
Fetal Bovine Serum	Sigma-Aldrich	F2442	For cell culture
G5 supplement	Gibco	17503012	For neural induction
HGF(Hepatocyte Growth Factor)	Sigma-Aldrich	H1404	For hepatic Induction
HLA-DR	Biologend	307605	
Human TGF-β3	Peptotech	#100-36E-10U	

Insulin-Transferrin-Selenous acid premix	Sigma-Aldrich	I3146	For hepatic Induction
ITS premix	Corning	354350	
LDL Uptake Assay kit	Abcam	ab133127	For hepatic characterization
Low glucose DMEM	Gibco	11885-084	For hepatic induction
MAP2 antibody	Sigma-Aldrich	M4403	For neural characterization
N2 supplement	Gibco	17502048	For neural induction
Neural Basal Media	Gibco	21103049	For neural induction
NFM antibody	Sigma-Aldrich	N4142	For neural characterization
Nikon Elipse TS100 microscope	Nikon		For fluorescence imaging
Oil Red O	Sigma-Aldrich	01391-250MI	Adipogenic stain
Oncostatin M	R&D Systems	295-OM-010/CF	For hepatic Induction
Petridish	Tarson	460090-90MM	For tissue cutting
Potassium phosphate monobasic	Sigma-Aldrich	15655-100G	Osteogenic induction
Propan-2-ol	Thermo Fisher	Q13827	For Oil Red O extraction
Sodium pyruvate solution	Sigma life sciences	S8636-100ML	
Trypsin-EDTA	Sigma-Aldrich	T4049	For cell passaging
Whatman filter paper	merck	WHA1001325	filter paper
α - Minimum Essential Media (α -MEM)	Sigma-Aldrich	M0643-10X 1L	Media for primary culture
β -glycerophosphate disodium salt hydrate	Sigma-Aldrich	G9422-50G	