

Materials List for:

Chondrogenic Pellet Formation from Cord Blood-derived Induced Pluripotent Stem Cells

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Materials

Name	Company	Catalog Number	Comments
Plasticware			
100 mm Dish	TPP	93100	
6-well Plate	TPP	92006	
50 mL Conical Tube	SPL	50050	
15 mL Conical Tube	SPL	50015	
10 mL Disposable Pipette	Falcon	7551	
5 mL Disposable Pipette	Falcon	7543	
12-well Plate	TPP	92012	
Name	Company	Catalog Number	Description
E8 Medium Materials			
DMEM/F12, HEPES	Life Technologies	11330-057	E8 Medium (500 mL)
Sodium Bicarbonate	Life Technologies	25080-094	E8 Medium (Conc.: 543 µg/mL)
Sodium Selenite	Sigma Aldrich	S5261	E8 Medium (Conc.: 14 ng/mL)
Human Transferrin	Sigma Aldrich	T3705	E8 Medium (Conc.: 10.7 µg/mL)
Basic FGF2	Peptotech	100-18B	E8 Medium (Conc.: 100 ng/mL)
Human Insulin	Life Technologies	12585-014	E8 Medium (Conc.: 20 µg/mL)
Human TGFβ1	Peptotech	100-21	E8 Medium (Conc.: 2 ng/mL)
Ascorbic Acid	Sigma Aldrich	A8960	E8 Medium (Conc.: 64 µg/mL)
DPBS	Life Technologies	14190-144	
Vitronectin	Life Technologies	A14700	
ROCK Inhibitor	Sigma Aldrich	Y0503	
Name	Company	Catalog Number	Description
Quality Control Materials			
18 mm Cover Glass	Superior	HSU-0111580	
4% Paraformaldehyde	Tech & Innovation	BPP-9004	
Triton X-100	BIOSESANG	9002-93-1	
Bovine Serum Albumin	Vector Lab	SP-5050	
Anti-SSEA4 Antibody	Millipore	MAB4304	
Anti-Oct4 Antibody	Santa Cruz	SC9081	
Anti-TRA-1-60 Antibody	Millipore	MAB4360	
Anti-Sox2 Antibody	Biologend	630801	
Anti-TRA-1-81 Antibody	Millipore	MAB4381	

Anti-Klf4 Antibody	Abcam	ab151733	
Alexa Fluor 488 goat anti-mouse IgG (H+L) antibody	Molecular Probe	A11029	
Alexa Fluor 594 goat anti-rabbit IgG (H+L) antibody	Molecular Probe	A11037	
DAPI	Molecular Probe	D1306	
Prolong gold antifade reagent	Invitrogen	P36934	
4% Paraformaldehyde	Tech & Innovation	BPP-9004	
Tween 20	BIOSESANG	T1027	
Bovine Serum Albumin	Vector Lab	SP-5050	
Anti-Collagen II antibody	abcam	ab34712	1:100
Alcian blue	Sigma Aldrich	A3157-10G	
Fast Green FCF	Sigma Aldrich	F7252-25G	
Safranin O	Sigma Aldrich	090m0039v	
Nuclear fast red	Americanmastertech	STNFR100	
xylene	Duksan	115	
Ethanol	Duksan	64-17-5	
Mayer's hematoxylin solution	wako pure chemical industries	LAK7534	
DAP	VECTOR LABORATORIES	SK-4100	
Slide Glass, Coated	Hyun Il Lab-Mate	HMA-S9914	
Trizol	Invitrogen	15596-018	
Chloroform	Sigma Aldrich	366919	
Isopropylalcohol	Millipore	109634	
Ethanol	Duksan	64-17-5	
RevertAid First Strand cDNA Synthesis kit	Thermo Scientific	K1622	
Name	Company	Catalog Number	Description
Chondrogenic Differentiation Materials			
DMEM	Life Technologies	11885	Chondrogenic media component (500 mL)
Penicilin Streptomycin	Life Technologies	P4333	Chondrogenic media component (Conc.: 1%)
Ascorbic Acid	Sigma Aldrich	A8960	Chondrogenic media component (Conc.: 64 µg/mL)
MEM Non-Essential Amino Acids Solution (100x)	Life Technologies	11140-050	Chondrogenic media component (Conc.: 100 mM)
rhBMP-2	R&D	355-BM-050	Chondrogenic media component (Conc.:100 ng/ml)
Recombinant Hman TGF-beta3	R&D	243-B3-002	Chondrogenic media component (Conc.:10 ng/ml)
KnockOut Serum Replacement	Life Technologies	10828-028	Chondrogenic media component (Conc.: 1%)
ITS+ Premix	BD	354352	Chondrogenic media component (Conc.: 1%)
Dexamethasone-Water Soluble	Sigma Aldrich	D2915-100MG	Chondrogenic media component (Conc.:10 ⁻⁷ M)
GlutaMAX Supplement	Life Technologies	35050-061	Chondrogenic media component (Conc.: 1%)
Sodium pyruvate solution	Sigma Aldrich	S8636	Chondrogenic media component (Conc.: 1%)

L-Proline	Sigma Aldrich	P5607-25G	Chondrogenic media component (40 µg/ml)
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