

Materials List for:

Feeder-free Derivation of Melanocytes from Human Pluripotent Stem Cells

Scott J. Callahan^{1,2}, Yvonne Mica³, Lorenz Studer¹

¹The Center for Stem Cell Biology, Developmental Biology Program, Memorial Sloan-Kettering Cancer Center

²Cancer Biology and Genetics Program, Gerstner Sloan-Kettering Graduate School, Sloan-Kettering Institute for Cancer Research

³Thermo Fisher Scientific

Correspondence to: Lorenz Studer at studerl@MSKCC.ORG

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Materials

Name	Company	Catalog Number	Comments
Accutase	Innovative Cell Technologies	AT104	
apo human transferrin	Sigma	T1147	
Ascorbic Acid (L-AA)	Sigma	A4034	100 mM
B27 (B27 Supplement)	Invitrogen	17504044	
β-Mercaptoethanol	Gibco-Life Technologies	21985-023	10 mg/ml
BMP4	R&D Systems	314-bp	
CHIR99021	Tocris-R&D Systems	4423	6 mM
Cholera toxin	Sigma	C8052	50 mg/ml
cAMP (cyclicAMP)	Sigma	D0627	100 mM
Dexamethasone	Sigma	D2915-100MG	50 μM
DMEM - Dulbecco's Modified Eagle Medium	Gibco-Life Technologies	11985-092	
DMEM/F12 - Dulbecco's Modified Eagle Medium: Nutrient Mixture F-12	Gibco-Life Technologies	1133--032	
DMEM/F12 powder	Invitrogen	12500-096	
EDN3 (Endothelin-3, human)	American Peptide Company	88-5-10B	100 μM
Fibronectin	BD Biosciences	356008	200 μg/ml
gelatin (PBS without Mg/Ca)	in house		0.1% in PBS
Glucose	Sigma	G7021	
Human insulin	Sigma	I2643	
ITS+ Universal Culture Supplement Premix	BD Biosciences	354352	
KSR (Knockout Serum Replacement)	Gibco-Life Technologies	10828-028	
Knockout DMEM	Gibco-Life Technologies	10829-018	
L-Glutamine	Gibco-Life Technologies	25030-081	
LDN193189	Stemgent	04-0074	100 mM
Low glucose DMEM	Invitrogen	11885-084	
Matrigel matrix	BD Biosciences	354234	Dissolve 1:20 in DMEM/F12
MCDB201 Medium	Sigma	M6770	
MEM minimum essential amino acids solution	Gibco-Life Technologies	11140-080	
Mouse embryonic fibroblasts (7 million cells/vial)	GlobalStem	GSC-8105M	
Mouse Laminin-I	R&D Systems	3400-010-01	1 mg/ml

Neurobasal medium	Invitrogen	21103049	
Penicilin/Streptomycin	Gibco-Life Technologies	15140-122	10,000 U/ml
Poly-L Omithin hydrobromide	Sigma	P3655	15 mg/ml
Progesterone	Sigma	P8783	0.032 g in 100 ml 100% ethanol
Putrescine dihydrochloride	Sigma	P5780	
FGF2 (Recombinant human FGF basic)	R&D Systems	233-FB-001MG/CF	10 mg/ml
SB431542	Tocris-R&D Systems	1814	10 mM
Selenite	Sigma	S5261	
Sodium Bicarbonate	Sigma	S5761	
SCF (Stem Cell Factor, recombinant Human)	Peprtech Inc.	300-07	50 µg/ml
TYRP1 (G-17) Antibody	Santa Cruz	10443	1:200
TYRP2 Antibody	Abcam	74073	1:200
Trypsin-EDTA (0.05%)	Gibco-Life Technologies	25300-054	
Y-27632 dihydrochloride	Tocris-R&D Systems	1254	10 mM