

Materials List for:

Hemogenic Endothelium Differentiation from Human Pluripotent Stem Cells in A Feeder- and Xeno-free Defined Condition

Ryo Ohta¹, Ryohichi Sugimura^{*}, Akira Niwa¹, Megumu K. Saito¹

¹Center for iPS cell research and application (CiRA)

^{*}These authors contributed equally

Correspondence to: Akira Niwa at akiranw@cira.kyoto-u.ac.jp, Megumu K. Saito at msaito@cira.kyoto-u.ac.jp

URL: <https://www.jove.com/video/59823>

DOI: [doi:10.3791/59823](https://doi.org/10.3791/59823)

Materials

Name	Company	Catalog Number	Comments
0.5 M EDTA	Thermo Fisher Scientific	15575	0.5 M EDTA
40 µm cell strainer	Corning	352340	40µm cell strainer
6 well plate	Corning	353046	6 well plate
Antibiotic-antimycotic	Thermo Fisher Scientific	15240-112	Penicillin/Streptomycin/ Amphotericin B
anti-CD34 antibody	Beckman Coulter	A07776	anti-CD34 antibody
anti-CD45 antibody	Biolegend	304012	anti-CD45 antibody
BMP4	R&D Systems	314-BP-010	BMP4
CD34 microbeads	Miltenyi	130-046-703	CD34 microbeads
CHIR99021	Wako	038-23101	CHIR99021
Essential 6	Thermo Fisher Scientific	A15165-01	Hemogenic basal medium
Essential 8	Thermo Fisher Scientific	A15169-01	Mesodermal basal medium
Ezsphere SP Microplate 96well	AGC	4860-900SP	micro-fabricated plastic vessel
FCS	Biosera	FB-1365/500	FCS
Fibronectin	Millipore	FC010-100MG	Fibronectin
Flt-3L	R&D Systems	308-FK-005	Flt-3L
Glutamax	Thermo Fisher Scientific	35050-061	L-Glutamine
IL-6/IL-6Rα	R&D Systems	8954-SR	IL-6/IL-6Rα
iMatrix-511	Matrixome	892 001	LM511-E8
ITS-X	Thermo Fisher Scientific	51500-056	Insulin-Transferrin-Selenium- Ethanolamine
MACS buffer	Miltenyi	130-091-221	magnetic separation buffer
Methocult 4435MethoCult™ H4435 Enriched	STEMCELL TECHNOLOGIES	04435	Methylcellulose-based media
mTeSR1	STEMCELL TECHNOLOGIES	85850	PSC maintenance medium
PBS	nacalai tesque	14249-24	PBS
SB431542	Wako	031-24291	SB431542
SCF	R&D Systems	255-SC-010	SCF
Stemline II Hematopoietic Stem Cell Expansion Medium	Sigma Aldrich	S0192-500ML	Hematopoietic basal medium
TPO	R&D Systems	288-TPN	TPO
TrypLE Express	Thermo Fisher Scientific	12604-021	dissociation solution
VEGF	R&D Systems	293-VE-010	VEGF
Y-27632	Wako	253-00513	Y-27632