

Materials List for:

Hemogenic Reprogramming of Human Fibroblasts by Enforced Expression of Transcription Factors

Rita Silvério-Alves^{1,2,3}, Andreia M. Gomes³, Iliia Kurochkin⁴, Kateri A. Moore^{5,6}, Carlos-Filipe Pereira^{1,2,3}

¹Molecular Medicine and Gene Therapy, Lund Stem Cell Center, Lund University

²Wallenberg Center for Molecular, Lund University

³Center for Neuroscience and Cell Biology, University of Coimbra

⁴Skolkovo Institute of Science and Technology

⁵Department of Cell, Developmental and Regenerative Biology, Icahn School of Medicine at Mount Sinai

⁶Black Family Stem Cell Institute, Icahn School of Medicine at Mount Sinai

Correspondence to: Carlos-Filipe Pereira at filipe.pereira@med.lu.se

URL: <https://www.jove.com/video/60112>

DOI: [doi:10.3791/60112](https://doi.org/10.3791/60112)

Materials

Name	Company	Catalog Number	Comments
0.45 µm low-protein binding filter, 150 mL Bottle Top Vacuum Filter	Corning	#430625	
2-Mercaptoethanol	Sigma-Aldrich	#M6250	
Alexa Fluor 488 anti-human CD34 clone 581	BioLegend	#343518	
BD Pharmingen APC Mouse Anti-Human Angiotensin Converting Enzyme (CD143) clone BB9	BD Biosciences	#557929	
BES buffered saline	Sigma-Aldrich	#14280	
Calcium chloride (CaCl ₂)	Sigma-Aldrich	#449709	
Centrifugal filter unit, Amicon Ultra-15 Centrifugal Filter Unit	Sigma-Aldrich	#UFC903096	
Dissociation solution, TrypLE Express Enzyme (1x) no phenol red	Gibco	#12604-021	
Doxycycline hyclate (DOX)	Sigma-Aldrich	#D9891	
eBioscience CD49f (Integrin alpha 6) Monoclonal Antibody (eBioGoH3 (GoH3)), PE-Cyanine7	Invitrogen	#25-0495-82	
FUW-M2rtTA	Addgene	#20342	
Gelatin from Porcine Skin Type A	Sigma-Aldrich	#G1890	
Gibco L-Glutamine (200 mM)	ThermoFisher Scientific	#25030-024	
Gibco MEM Non-Essential Amino Acids Solution (100x)	ThermoFisher Scientific	#11140-035	
Hematopoietic medium, MyeloCult H5100	STEMCELL Technologies	#05150	
Hexadimethrine bromide (polybrene)	Sigma-Aldrich	#H9268	
Human Dermal Fibroblasts (HDFs)	ScienCell	#2320	
HyClone Dulbecco's Modified Eagles Medium (DMEM)	GE Healthcare	#SH30243.01	
HyClone Fetal Bovine Serum (FBS)	GE Healthcare	#SV30160.03	
HyClone Penicillin Streptomycin 100x Solution (Pen/Strep)	GE Healthcare	#SV30010	

HyClone Phosphate Buffered Saline solution (PBS)	GE Healthcare	#SH30256.01	
Hydrocortisone	STEMCELL Technologies	#7904	
Mouse serum	Sigma-Aldrich	#M5905	
PE anti-human CD9 Antibody clone HI9a	BioLegend	#312105	
pFUW-tetO-3xFLAG-GATA2	Addgene	#125600	
pFUW-tetO-FOS	Addgene	#125598	
pFUW-tetO-GATA2	Addgene	#125028	
pFUW-tetO-GFI1B	Addgene	#125597	
pLV-tetO-HA-GFI1B	Addgene	#125599	
pMD2.G	Addgene	#12259	
psPAX2	Addgene	#12260	