

Materials List for:

Generation of Integration-free Induced Pluripotent Stem Cells from Human Peripheral Blood Mononuclear Cells Using Episomal Vectors

Wei Wen¹, Jian-Ping Zhang¹, Wanqiu Chen², Cameron Arakaki², Xiaolan Li^{1,2}, David Baylink², Gary D. Botimer³, Jing Xu¹, Weiping Yuan¹, Tao Cheng^{1,4,5,6,7}, Xiao-Bing Zhang^{1,2}

¹State Key Laboratory of Experimental Hematology, Institute of Hematology and Blood Disease Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College

²Division of Regenerative Medicine, Department of Medicine, Loma Linda University

³Department of Orthopaedic Surgery, Loma Linda University

⁴Center for Stem Cell Medicine, Chinese Academy of Medical Sciences

⁵Department of Stem Cell & Regenerative Medicine, Peking Union Medical College

⁶Collaborative Innovation Center for Cancer Medicine

⁷Tianjin Key Laboratory of Blood Cell Therapy and Technology

Correspondence to: Tao Cheng at chengtao@ihcams.ac.cn, Xiao-Bing Zhang at xzhang@llu.edu

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Materials

Name	Company	Catalog Number	Comments
Hematopoietic Stem Cell Expansion Medium	Sigma	S0192	Store at 4 °C
Human Stem Cell Factor (SCF)	Peprtech	300-07	Store at -20 or -80 °C
Interleukin-3 (IL-3)	Peprtech	AF-200-03	Store at -20 or -80 °C
Erythropoietin (EPO)	Peprtech	100-64	Store at -20 or -80 °C
Insulin Growth Factor-1 (IGF-1)	Peprtech	100-11	Store at -20 or -80 °C
Dexamethasone	Sigma	D4902	Store at -20 or -80 °C
1-thioglycerol (MTG)	Sigma	M6145	Store at -20 or -80 °C
DMEM/F12 medium	Gibco	112660-012	Store at 4 °C
L-glutamine (100x)	Gibco	25030-081	Store at -20 °C
Penicillin/Streptomycin (100x)	Gibco	15140-122	Store at -20 °C
Non-essential Amino Acids solution (100x)	Gibco	11140-050	Store at 4 °C
Fibroblast Growth Factor 2 (FGF2)	Peprtech	100-18B	Store at -20 or -80 °C
Insulin-Transferrin-Selenium (ITS, 100x)	Gibco	41400-045	Store at 4 °C
Ascorbic acid	Sigma	49752	Store at -20 °C
DMEM (high glucose) medium	Thermo	SH30243.01B	Store at 4 °C
Fetal Bovine Serum (FBS)	Hyclone	SV30087.01	Store at -20 °C
Ficoll	GE Healthcare, SIGMA	17-5442-02	Store at RT
Trehalose	Sigma	T9531	Store at 4 °C
Dimethylsulfoxide (DMSO)	Sigma	D2650	Store at RT, protect from light
Endofree Plasmid Maxi Kit (10)	Qiagen	12362	Store at RT
IMDM	Gibco	21056-023	Store at 4 °C
Human CD34+ Cell Nucleofection Kit	Lonza	VPA-1003	Store at RT, nucleofection buffer and supplement should be stored at 4 °C
Sodium Butyrate	Sigma	B5887	Store at -20 or -80 °C
ROCK inhibitor - Y27632	STEMGENT	04-0012-10	Store at -20 °C

Essential 8 basal medium (E8)	Gibco	A15169-01	Store at 4 °C, the supplement should be stored at -20 or -80 °C
Matrigel	BD	354277	Store at -20 or -80 °C
2x EasyTaq PCR SuperMix (+dye)	TransGen Biotech	AS111	Store at -20 °C
Cell detachment solution	STEMGENT	01-0006	Store at -20 °C, Accutase as a cell detachment solution to obtain a single-cell suspension
DAPI	Sigma	D9542-1MG	Store at 4 or -20 °C
Anti-Nanog AF488	BD	560791	Store at 4 °C, primary antibody used for Immunofluorescence, dilute 1/100 when used
Anti-OCT4	abcam	ab19857	Store at 4 °C, primary antibody used for Immunofluorescence, dilute 1/100 when used
AF488 donkey anti-mouse IgG	Invitrogen	A21202	Store at 4 °C, secondary antibody used for Immunofluorescence, dilute 1/500 when used
PE anti-human TRA-1-60-R antibody	Biolegend	330610	Store at 4 °C, antibody used for flow cytometry
eFluor 570-conjugated anti-SSEA4	eBioscience	41-8843	Store at 4 °C, antibody used for flow cytometry
Isotype antibody	eBioscience	11-4011	Store at 4 °C, antibody used for flow cytometry
Alkaline Phosphatase Detection Kit	SiDanSai	1102-100	Store at 4 °C
Genomic DNA Extraction Kit	TIANGEN	DP304-02	Store at RT
Trypan Blue solution	Sigma	T8154	Store at RT
Flow cytometry cell analyzer	BD	LSRII	
Spinning Disk Confocal microscope (SDC)	PerkinElmer	UltraVIEW VOX	for confocal imaging
Nucleofection device	Lonza	Nucleofector 2b	for the nucleofection of PB MNC
ImageQuant LAS-4010	GE		to take photos of AP staining in bulk