

Materials List for:

# Efficient iPS Cell Generation from Blood Using Episomes and HDAC Inhibitors

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## Materials

Name	Company	Catalog Number	Comments
Ficoll-Paque PLUS	Fisher Scientific	45-001-750	Store at 4 °C. Warm to room temperature before use.
DPBS	Life Technologies	14190-250	Store at 4 °C.
RPMI 1640	Life Technologies	11875-093	Store at 4 °C.
fetal bovine serum (FBS)	Life Technologies	10437028	Store at -20 °C until needed. Thaw, aliquot, store at 4 °C.
dimethyl sulfoxide (DMSO)	Sigma-Aldrich	154938	Store at room temperature.
QBSF-60 serum-free medium	Fisher Scientific	50-983-234	Store at 4 °C.
penicillin/streptomycin	Life Technologies	15140122	Store at 4 °C.
Cell Line Nucleofector Kit V	Lonza	VCA-1003	Store at 4 °C.
2% gelatin solution	Sigma-Aldrich	G1393	Store at 4 °C, liquify in 37 °C water bath before use.
Hank's Balanced Saline Solution (HBSS)	Life Technologies	14175-103	Store at 4 °C.
Dulbecco's Modified Eagle Medium (DMEM)	Life Technologies	11965-092	Store at 4 °C.
Iscove's Modified Dulbecco's Medium (IMDM)	Life Technologies	12440-061	Store at 4 °C.
L-glutamine, 200 mM	Life Technologies	25030-081	Aliquot, freeze at -20 °C.
non-essential amino acids (NEAA), 100X	Life Technologies	11140-050	Store at 4 °C, away from light.
DMEM/Ham's F12, 1:1	Fisher Scientific	SH30023.02	Store at 4 °C.
KnockOut Serum Replacement	Life Technologies	10828-028	Aliquot, freeze at -20 °C.
sodium pyruvate, 100 mM	Life Technologies	11360-070	Store at 4 °C.
sodium bicarbonate, 7.5%	Life Technologies	25080094	Store at 4 °C.
basic fibroblast growth factor (bFGF)	Life Technologies	PHG0263	Make 10 mg/ml stock in DPBS, aliquot, freeze at -20 °C. Once thawed, store at 4 °C.
sodium butyrate	Sigma-Aldrich	B5887-1G	Make 2000x stock (400 mM) in DPBS, aliquot, freeze at -20 °C. Once thawed, store at 4 °C.
hES Cell Cloning & Recovery Supplement	Stemgent	01-0014-500	Store at -20 °C until needed. Once thawed, store at 4 °C.
ESC-qualified BD matrigel	BD Biosciences	35-4277	Thaw overnight on ice at 4 °C, aliquot into pre-chilled tubes using pre-chilled pipette tips. Store at -20 °C until needed. Thaw at 4 °C, use immediately.
StemSpan SFEM	STEMCELL Technologies	9650	Aliquot, freeze at -20 °C.

ascorbic acid, powdered	Sigma-Aldrich	A4403-100MG	Make 5 mg/ml stock in DPBS, sterile filter, store at 4 °C.
recombinant human stem cell factor (SCF)	R & D Systems	255-SC-010	Make 100 µg/ml stock in SFEM, aliquot, freeze at -20 °C. Once thawed, store at 4 °C.
recombinant human interleukin 3 (IL-3)	R & D Systems	203-IL-010	Make 100 µg/ml stock in SFEM, aliquot, freeze at -20 °C. Once thawed, store at 4 °C.
erythropoietin (EPO)	R & D Systems	287-TC-500	Make 1000 U/ml stock in SFEM, aliquot, freeze at -20 °C. Once thawed, store at 4 °C.
recombinant human insulin-like growth factor 1 (IGF-1)	R & D Systems	291-G1-200	Make 100 µg/ml stock in SFEM, aliquot, freeze at -20 °C. Once thawed, store at 4 °C.
β-mercaptoethanol	Sigma-Aldrich	M7522	Make 1000x stock (100 mM) in DPBS.
dexamethasone	Sigma-Aldrich	D4902-25MG	Make 50x stock (50 µM) in DPBS, sterile filter, store at 4 °C.
SAHA (vorinostat)	Cayman Chemical	149647-78-9	Make 2,000x stock (400 mM) in DPBS, aliquot, freeze at -20 °C. Once thawed, store at 4 °C.
12 well tissue culture plate	Fisher Scientific	08-772-29	
15 ml conical tube	Sarstedt	62553002	
1.5 ml Eppendorf tube	Fisher Scientific	05-408-129	
6 well tissue culture plate	Fisher Scientific	08-772-1B	
35 mm tissue culture plates	BD Biosciences	353001	
10 ml disposable serological pipettes	Fisher Scientific	13-675-20	
5 ml disposable serological pipettes	Fisher Scientific	13-675-22	
2 ml disposable serological pipettes	Fisher Scientific	13-675-17	
20 µl pipette tips, barrier tips	Genessee	24-404	
glass Pasteur pipettes	Fisher Scientific	13-678-20D	
pipette aid	Fisher Scientific	13-681-15	
pCXLE-hOCT3/4-shp53-F	Addgene	27077	
pCXLE-hSK	Addgene	27078	
pCXLE-hUL	Addgene	27080	
pCXLE-EGFP	Addgene	27082	
pCXWB-EBNA1	Addgene	37624	