

Materials List for:

Microfluidic Assay for the Assessment of Leukocyte Adhesion to Human Induced Pluripotent Stem Cell-derived Endothelial Cells (hiPSC-ECs)

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Materials

Name	Company	Catalog Number	Comments
Vena8 Endothelial+ biochip	Cellix Ltd	V8EP-800-120-02P10	
Mirus Evo Nanopump	Cellix Ltd	MIRUS-EVO-PUMP	1 x syringe pump; 1 x VenaFluxAssay Software; 1 x tubing kit; power supply and cables.
8-channel manifold MultiFlow8	Cellix Ltd	MIRUS-MULTIFLOW8	
Humidified box	Cellix Ltd	HUMID-BOX	
Fluorescence imaging system Leica AF6000	Leica Microsystems		
Electron-multiplying charge-coupled device camera	Hamamatsu	C9100	
Biological safety cabinet/laminar flow-hood	Cleanair		
CO ₂ cell-culture incubator	Panasonic	MCO-170AICUV	
Centrifuge	Hitachi	himac-CT6EL	
Handheld pipetman (P-10 (10 mL), P-200 (200 µL), P-1000 (1,000 µL))	Gilson international	4807 (10µl), 4810 (200µl), 4809 (1000µl)	
Sterile plastic pipette	Greiner Bio-One	606180 (5ml), 607180 (10ml)	
Petri dish	VWR/ Duran Group	391-0860	
Culture flasks (75 cm ²)	CELLSTAR	658,170	
Centrifuge tube (15 mL)	CELLSTAR	188271	
Name	Company	Catalog Number	Comments
Gelatin from porcine skin, type A	Sigma-Aldrich	G1890	
Fibronectin (Bovine plasma)	Sigma-Aldrich	F1141	
DPBS, no calcium, no magnesium	Life Technologies	14190-169	
Human Endothelial-SFM	Life Technologies	11111-044	
Human VEGF 165 IS, premium grade	Miltenyi Biotec	130-109-386	
Human FGF-2, premium grade	Miltenyi Biotec	130-093-842	
Platelet-poor Plasma Derived Serum, bovine	Biomedical Technologies	BT-214	
Recombinant Human TNF-α	Tebu-bio	300-01A-A	
TrypLE Select	Life Technologies	12563029	
DiOC6(3)	Sigma-Aldrich	318426	
RPMI 1640 Medium	Life Technologies	21875-034	
2-Mercaptoethanol (50 mM)	Life Technologies	31350010	

FBS	Life Technologies	10270-106	
L-glutamine	Life Technologies	25030-024	
Penicillin-Streptomycin (5,000 U/mL)	Life Technologies	15070-063	
Distilled water	Life Technologies	15230-089	
Ethanol absolute	Merck	1.00983.2500	
VCAM-1	R&D systems	FAB5649P	
E-Selectin	R&D systems	BBA21	
ICAM-1	R&D systems	BBA20	
Name	Company	Software version	Comments
Cellrofiler	CellProfiler	2.1.1	
VenaFluxAssay Software	Cellix Ltd	2.3.a	