

Materials List for

Porphyrin-Modified Beads for Use as Compensation Controls in Flow Cytometry

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jove.com/video/65294

Materials

Name	Company	Catalog Number	Comments
Amber plastic vials, 2 mL, U- bottom, polypropylene	Research Products International	ZC1028-500	
Amine-funtionalized polystyrene divinylbenzene crosslinked (PS/DVB) beads, 10.6 µm diameter, 2.5% w/v aqueous suspension, 3.82 x 10 ⁷ beads/mL, 7.11 x 10 ¹¹ amine groups/ bead	Spherotech	APX-100-10	Diameter spec. 8.0-12.9 um, suspension 2.5% w/v 3.82 x 10 ⁷ beads/mL, 7.11 x 10 ¹¹ amine groups/ bead
Conical tubes, 50 mL, Falcon	Fisher Scientific	14-432-22	
Centrifuge			with appropriate rotor
Disposable polystyrene bottle with cap, 150 mL	Fisher Scientific	09-761-140	
EDC (N- (3- dimethylaminopropyl)- N'- ethylcarbodiimide hydrochloride), ≥98%	Sigma	03450-1G	CAS No: 25952-53-8
FlowJo Single Cell Analysis Software (v10.6.1)	BD		
Glass coverslips, 22 x 22 mm	Fisher Scientific	12-540-BP	
Glass fiber syringe filters (Finneran, 5 µm, 13 mm diameter)	Thomas Scientific	1190M60	
Glass microscope slides, 275 x 75 x 1 mm	Fisher Scientific	12-550-143	
Hanks Balanced Salt Solution (HBSS)	Fisher Scientific	14-175-095	
Isopropanol, ACS grade	Fisher Scientific	AC423830010	
Mechanical pipette, 1 channel, 100-1000 uL with tips	Eppendorf	3123000918	
MES (22- (N- mopholino)- N'- ethanesulfonic acid, hemisodium salt	Sigma	M0164	CAS No: 117961-21-4
Navios EX flow cytometer	Beckman Coulter		
Olympus BX-40 microscope with DP73 camera and 40X objective with cellSens software	Olympus		or similar

Pasteur pipettes, glass, 5.75"	Fisher Scientific	13-678-6B	
pH meter (UB 10 Ultra Basic)	Denver Instruments		
Pipette controller (Drummond)	Pipete.com	DP101	
Plastic Syringe, 5 mL	Fisher Scientific	14955452	
Polystyrene Particles (non-functionalized), SPHERO, 2.5% w/v, 8.0-12.9 µm	Spherotech	PP-100-10	
Polypropylene tubes, 15mL, conical	Fisher Scientific	14-959-53A	
Polystyrene tubes, round bottom	Fisher Scientific	14-959-2A	
Rainbow Beads (Spherotech URCP-50-2K)	Fisher Scientific	NC9207381	
Serological pipettes, disposable - 10 mL	Fisher Scientific	07-200-574	
Serological pipettes, disposable - 25 mL	Fisher Scientific	07-200-576	
Sodium bicarbonate (NaHCO ₃)	Sigma	S6014	CAS No: 144-55-8
TCPPP (meso-tetra(4-carboxyphenyl)porphine) Frontier Scientific	Fisher Scientific	50-393-68	CAS No: 14609-54-2
Tecan Spark Plate Reader (or similar)	Tecan Life Sciences		
Tube revolver/rotator	Thermo Fisher	88881001	
Vortex mixer	Fisher Scientific	2215365	