

Materials List for

Simultaneous Assessment of Kinship, Division Number, and Phenotype *via* Flow Cytometry for Hematopoietic Stem and Progenitor Cells

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Materials

Name	Company	Catalog Number	Comments
1.5 mL polypropylene microcentrifuge tubes	vWR	87003-294	
15-mL polypropylene tubes	vWR	734-0451	
50-mL polypropylene tubes	vWR	734-0448	
96-well U-bottom culture plate	Falcon	353077	
Anti-human Lin APC	Thermo Fisher	22-7776-72	Dilution 1/40
ARIA III	BD		Can be replaced with any FACS sorter able to sort individual cells in 96-wells plate
Carboxyfluorescein succinimidyl ester (CFSE)	Life Technologies	C34570	
Cell Trace Violet (CTV)	Life Technologies	C34571	
Compensation beads	BD	552843	
Dulbecco's modified Eagle medium (DMEM)	Life Technologies	11320033	
Ethylenediaminetetraacetic acid (EDTA)	Thermo Scientific	J62948-36	Prepare a solution 0.5 M, in sterilised water
FC block Fc1.3216	BD	564220	Dilution 1/50
Fetal Bovine Serum (FBS)	Dutscher	S1900-500C	Batch S00CH
FlowJo v10.8.1	BD		
Mouse anti-human CD10 PerCP-5.5, clone HI10a	Biolegend	312216	Dilution 1/20
Mouse anti-human CD123 BU395, clone 7G3	BD	564195	Dilution 1/15
Mouse anti-human CD34 APC-Cy7, clone 581	Biolegend	343513	Dilution 1/40
Mouse anti-human CD38 BV650, clone HB7	Biolegend	356620	Dilution 1/40

Mouse anti-human CD45RA AF700, clone HI100	BD	560673	Dilution 1/20
Mouse anti-human CD45RA PE-Cy7, clone HI100	BD	560675	Dilution 1/20
Mouse anti-human CD90 PE, clone 5E10	Biolegend	328110	Dilution 1/20
Phosphate Buffered Saline (PBS) 1X	Life Technologies	10010001	
Python			
R			
Sterile 12x75 mm conical polypropylene tubes	Falcon		
ZE5	Biorad		Can be replaced with any flow cytometry analyzer equipped with a plate reader
Laboratory prepared			
Cell culture media			Depends from the specific experiment. Prepare fresh daily and store at +4 °C until use
DMEM + 10% FBS			Can be stored in sterile conditions, at +4 °C up to 1 year. To prepare 500 mL, add 50 mL of FBS to 450 mL DMEM
PBS 1X + EDTA 0.1%			Can be stored in sterile conditions, at room temperature, up to 1 year. To prepare 500 mL, add 3.42 mL of EDTA 0.5 M to 500 mL PBS 1X
Staining buffer			Can be stored in sterile conditions, at +4 °C up to 1 year. To prepare 500 mL, add 2 mL of EDTA 0.5 M and 1 mL FBS to 500 mL PBS 1X