

Materials List for

Use of the Pyrimidine Analog, 5-Iodo-2'-Deoxyuridine (IdU) with Cell Cycle Markers to establish Cell Cycle Phases in a Mass Cytometry Platform

Raymond D Devine¹, Gregory K Behbehani¹

¹Ohio State Comprehensive Cancer Center, Division of Hematology, The Ohio State University

Corresponding Author

Gregory K Behbehani

Gregory.Behbehani@osumc.edu

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Materials

Name	Company	Catalog Number	Comments
Bovine Serum Albumin (BSA)	Sigma	A3059	Component of CSM
Centrifuge	Thermo Scientific	75-217-420	Sample centrifugation
Cleaved-PARP (D214)	BD Biosciences	F21-852	Identification of apoptotic cells
Cyclin B1	BD Biosciences	GNS-1	G2 Resolution
Dimethylsulfoxide (DMSO)	Sigma	D2650	Cryopreservative
EQ Four Element Calibration Beads	Fluidigm	201078	Internal metal standard for CyTOF performance
FACS Tube w/ mesh strainer	Corning	08-771-23	Cell strainer to remove clumps/debris before CyTOF run
Fetal Bovine Serum (FBS)	VWR	97068-085	Cell culture growth supplement
Helios	Fluidigm		CyTOF System/Platform
Heparin	Sigma	H3393	Staining additive to prevent non-specific staining
IdU (5-Iodo-2'-deoxyuridine)	Sigma	I7125	Incorporates in S-phase
Ki-67	eBiosciences	SolA15	Confirmation of G0/G1
MaxPar Multi Label Kit	Fluidigm	201300	Metal labeling kit, attaches metals to antibodies
Microplate Shaker	Thermo Scientific	88880023	Mixing samples during staining
Paraformaldehyde (PFA)	Electron Microscopy Services	15710	Fixative
pentamethylcyclopentadienyl-Ir(III)-dipyridophenazine	Fluidigm	201192	Cell identification during CyTOF acquisition
p-H2AX (S139)	Millipore	JBW301	Detection of DNA damage
p-HH3 (S28)	Biolegend	HTA28	M-phase Resolution
Phosphate Buffered Saline (PBS)	Gibco	14190-144	Wash solution for cell culture and component of fixative solution
p-Rb (S807/811)	BD Biosciences	J112906	G0/G1 Resolution
Proteomic Stabilizer	SmartTube Inc	PROT1	Sample fixative
RPMI 1640	Gibco	21870-076	Cell culture growth medium

Sodium Azide	Acros Organics	AC447810250	Component of CSM/Antibody buffer, biocide
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