

Fluorophore selection guide for the Attune® Acoustic Focusing Cytometer

Fluorophore selection guide for the Attune® Acoustic Focusing Cytometer with standard filter set.

		Instrument Configuration	Default filter (nm)	Filter range (nm)	Fluorophores	Other fluorescent reagents		
Excitation laser	Violet (405 nm)	Blue	Blue/Violet	450/40	430-470	Pacific Blue™ Alexa Fluor® 405	PO-PRO™-1 DyeCycle™ Violet Fixable Violet Dead Cell Stain CellTrace™ Violet Calcein Violet SYTOX® Blue FxCycle™ Violet Click-iT® Pacific Blue™	
		Green	Blue/Violet	522/31	507-537	Qdot® 525 Horizon™ V500	Fixable Aqua Dead Cell Stain F2N12S (apoptotic)	
		Orange	Blue/Violet	603/48	579-627	Pacific Orange™ Qdot® 605	Fixable Yellow Dead Cell Stain F2N12S (live)	
	Blue (488 nm)	Green	All Configurations	530/30	515-545	Alexa Fluor® 488 Fluorescein	Calcein Fluo-3/Fluo-4 TO-PRO®-1 iodide CFSE GFP JC-1/DiOC ₂ (3) SYTOX® Green DyeCycle™ Green Rhodamine 123 YO-PRO®-1 iodide Fixable Green Dead Cell Stain Click-iT® Alexa Fluor® 488	
			Orange	All Configurations	574/26	561-587	PE	PI Fura Red™ AM cell permeant DyeCycle™ Orange JC-1/DiOC ₂ (3) pHrodo™ Phagocytosis Particle Labeling Kit SNARF® (low pH) isomers SYTOX® Orange Dead cell stain
			Red	Blue/Violet	640LP	>640	PE-Alexa Fluor® 610 PerCP PE-Alexa Fluor® 700 PE-Cy® 5.5 TRI-COLOR® (TC) PE-Cy®5 PerCP-Cy® 5.5 PE-Cy® 7 PE-PE-Alexa Fluor® 750 Qdot® 655 Qdot® 705 Qdot® 800	JC-1/DiOC ₂ (3) Fixable Red Dead Cell Stain 7-AAD SNARF® (high pH) isomers SYTOX® AADvanced™ Dead Cell Stain DyeCycle™ Ruby
		Red (638 nm)	Red	Blue/Red	690/50	665-715	Qdot® 705 PerCP TRI-COLOR® (TC) PE-Cy®5 PerCP-Cy®5.5 PE-Cy®5.5	Vybrant® Dye Cycle™ Ruby
				Blue/Red	780/60	750-810	PE-Alexa Fluor® 750 Qdot® 800 PE-Cy®7	Vybrant® Dye Cycle™ Ruby
				Blue/Red	660/20	650-670	Allophycocyanin (APC) Alexa Fluor® 647	Fixable Far Red Dead Cell Stain Click-iT® Alexa Fluor® 647 FxCycle™ Far Red SYTOX® Red Dead cell stain TO-PRO®-3
			Near IR	Blue/Red	780/60	750-810	APC-Alexa Fluor® 750 APC-Cy®7	Fixable Near-IR Dead Cell Stain Vybrant® Dye Cycle™ Ruby

The Attune® Acoustic Focusing Cytometer comes equipped with one of the two configurations:

- Violet/blue: 405 nm (50 mW) and 488 nm (20 mW) lasers. This configuration has three emission channels per laser and allows up to six-color analysis in addition to forward and side scatter data collection.
- Red/blue: 638nm (50 mW) and 488 nm (20 mW) lasers. This configuration has four emission channels off the blue laser and 2 emission channels off the red laser and allows up to six-color analysis in addition to forward and side scatter data collection.
- Both configurations allow absolute cell counts without the need for counting beads.

Combined with the power of Molecular Probes® fluorescence detection technologies, the Attune® Acoustic Focusing Cytometer is ideal for many cell research analysis protocols, including the no-lyse, no -wash and no cell loss protocol.