

BD Life Sciences Relative Fluorochrome Brightness

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This table provides general guidance with respect to the relative capability of different fluorochromes to resolve dimly stained populations; it is not a representation of absolute fluorescence. Rankings were determined by comparing the stain index (resolution) of cells stained with multiple formats on several clones run on a variety of flow cytometers. Many factors can influence the relative fluorochrome/reagent performance on a given instrument, including laser power, PMT voltage, optical filters, antibody clone and biological sample.

		Fluorochrome			
		Very Bright	Bright	Moderate	Dim
Laser	Ultraviolet (355 nm)		BD Horizon™ BUV563 BD Horizon™ BUV615 BD Horizon™ BUV661 BD Horizon™ BUV737	BD Horizon™ BUV395 BD Horizon™ BUV496	BD Horizon™ BUV805
	Violet (405 nm)	BD Horizon™ BV421 BD Horizon™ BV650 BD Horizon™ BV711	BD Horizon™ BV480 BD Horizon™ BV605 BD Horizon™ BV786	BD Horizon™ BV510 BD Horizon™ BV750	BD Horizon™ V450 BD Horizon™ V500
	Blue (488 nm)	BD Horizon™ BB515 BD Horizon™ BB700 BD Horizon™ PE-CF594 PE-Cy™5	PE PE-Cy™7	FITC Alexa Fluor® 488 PerCP-Cy™5.5	PerCP
	Yellow/Green (561 nm)	PE BD Horizon™ PE-CF594 PE-Cy™5 PE-Cy™7			
	Red (640 nm)		APC Alexa Fluor® 647 BD Horizon™ APC-R700 BD Horizon™ R718		Alexa Fluor® 700 APC-H7 APC-Cy™7

Class 1 Laser Product.
For Research Use Only. Not for use in diagnostic or therapeutic procedures.

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BD Life Sciences Fluorochrome Specifications

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Fluorochrome	Fluorescence Emission Color	Ex-Max (nm)	Excitation Laser Line (nm) [†]	Em-Max (nm)	Analyzers ^Δ				Sorters ^Δ	
					BD Accuri™ C6	BD FACSCelesta™***	BD FACSymphony™ Product Family	BD LSRFortessa™ Product Family	BD FACSAria™ Product Family	BD FACSMelody™****
BD Horizon™ BUV395	Violet	348	355	395		●	●	●	●	●
BD Horizon™ BV421	Blue	407	405	421		●	●	●	●	●
BD Horizon™ V450	Blue	404	405	448		●	●	●	●	●
Pacific Blue™	Blue	401	405	452		●	●	●	●	●
Hoechst 33342	Blue	350	355, 375	461		●	●	●	●	●
BD Horizon™ BV480	Green	436	405	478		●	●	●	●	●
BD Horizon™ BUV496	Green	351	355	491		●	●	●	●	●
BD Horizon™ V500	Green	415	405	500		●	●	●	●	●
BD Horizon™ BV510	Green	405	405	510		●	●	●	●	●
BD Horizon™ BB515	Green	490	488	515	●	●	●	●	●	●
Alexa Fluor® 488	Green	495	488	519	●	●	●	●	●	●
FITC	Green	494	488	520	●	●	●	●	●	●
BD Horizon™ BUV563	Green	351	355	560		●	●	●	●	●
PE	Yellow	496, 564	488, 532, 561	578	●	●	●	●	●	●
BD Horizon™ BV605	Orange	407	405	605		●	●	●	●	●
BD Horizon™ PE-CF594	Orange	496, 564	488, 532, 561	612		●	●	●	●	●
BD Horizon™ BUV615	Orange	350	561	616		●	●	●	●	●
PI	Orange	351	488, 532, 561	617	●	●	●	●	●	●
7-AAD	Red	543	488, 532, 561	647	●	●	●	●	●	●
BD Horizon™ BV650	Red	407	405	650		●	●	●	●	●
BD Horizon™ BUV661	Red	351	355	657		●	●	●	●	●
APC	Red	650	633, 635, 640	660	●	●	●	●	●	●
PE-Cy™5	Red	496, 564	488, 532, 561	667	●	●	●	●	●	●
Alexa Fluor® 647	Red	650	633, 635, 640	668	●	●	●	●	●	●
PerCP [†]	Red	482	488, 532	675	●	●	●	●	●	●
PerCP-Cy™5.5	Red	482	488, 532	676	●	●	●	●	●	●
BD Horizon™ BB700	Red	485	488	693	●	●	●	●	●	●
BD Horizon™ APC-R700	Far Red	652	633, 635, 640	711		●	●	●	●	●
BD Horizon™ BV711	Far Red	407	405	711		●	●	●	●	●
BD Horizon™ R718	Far Red	695	640, 628	718		●	●	●	●	●
Alexa Fluor® 700	Far Red	696	633, 635, 640	722		●	●	●	●	●
BD Horizon™ BUV737	Far Red	350	355	737		●	●	●	●	●
BD Horizon Brilliant™ BV750	Far Red	405	405	745		●	●	●	●	●
PE-Cy™7	Infrared	496, 564	488, 532, 561	778	●	●	●	●	●	●
APC-Cy™7	Infrared	650	633, 635, 640	779	●	●	●	●	●	●
BD Horizon™ BV786	Infrared	407	405	786		●	●	●	●	●
BD Horizon™ BUV805	Infrared	351	355	803		●	●	●	●	●
BD® APC-H7	Infrared	650	633, 635, 640	782	●	●	●	●	●	●

^Δ Some fluorochromes require additional filters for instruments to measure. Contact your BD Representative for more information.

^{*} Capable of detecting up to 8 colors simultaneously (488-nm laser available on all configurations; 405-nm and 640-nm lasers available on select configurations).

^{**} Capable of detecting up to 12 colors simultaneously (488-nm and 405-nm lasers available on all configurations; 355-nm, 561-nm, and 640-nm lasers available on select configurations).

^{***} Capable of detecting up to 9 colors simultaneously (488-nm laser available on all configurations; 405-nm and 640-nm lasers available on select configurations).

[†] The excitation laser line represents commonly used lasers that excite the fluorochrome. It does not necessarily reflect the lasers available for each particular instrument.

[‡] Sensitivity for PerCP with high-power lasers (>25 mW) is reduced and is only recommended for known highly expressed markers.

