

BD FACSAria™ II Cell sorter

Technical specifications

643184 BD FACSAria™ II alignment free cell sorter with air cooled lasers

Lasers

- Blue 488 nm
- Red 633 nm
- Violet 405 nm
- Near UV 375 nm

Fluorescence detectors and filters

11 detectors: FSC, SSC, 5 fluorescence detectors from the 488 nm, 2 fluorescence detectors from the 633 nm, and 2 fluorescence detectors from the 405 nm / 375 nm laser.

Standard filters

- Forward scatter detector
 - Photodiode with a 488/10 bandpass filter
- Side Scatter Detector
 - Photomultiplier with 488/10 bandpass filter
- 5 detectors from the blue laser
 - 530 +/- 30 nm
 - 585 +/- 42 nm
 - 616 +/- 23 nm
 - 695 +/- 40 nm
 - 780 +/- 60 nm
- 2 detectors from the red laser
 - 660 +/- 20 nm
 - 780 +/- 60 nm
- 2 detectors from the near UV laser
 - 450 +/- 20 nm
 - 675 +/- 20 nm

Special filters for the blue laser

- 510 +/- 21 nm for GFP
- 550 +/- 30 nm for YFP

Examples of detectable fluorochromes

Laser	Detector alias	Detector filters	Fluorochromes
488 nm blue	'FITC'	502 LP + 530/30	FITC, Alexa Fluor® 488 , Alexa Fluor® 514, DyLight® 488, Fluorescein-5-maleimide (FMLA), Fluorescein, GFP, MitoTracker Green LIVE/DEAD® Fixable Green, SYTOX® Green Dead Cell Stain, Zombie Green™ Fixable (viability)
	'PE'	556 LP + 585/42	eFluor® 605NC, RD1 (Phycoerythrin), eFluor® 585NC, PE-Dazzle™ 594, tdTomato, Propidium Iodide (PI), Sytox Orange
	'PE-Texas Red'	610 LP + 616/23	PE-Texas Red (ECD), eFluor® 605NC, PE-Alexa Fluor™ 610, PE-Dylight® 590, PE-Dazzle™ 594, mCherry, 7-AAD, LIVE/DEAD® Fixable Red, , Propidium Iodide (PI) , SYTOX® AADvanced™ Dead Cell Stain, LIVE/DEAD® Fixable Red
	'PerCP-Cy5.5'	655 LP + 695/40	PerCP, PerCP-Cy5.5™ , PerCP-eFluor® 710, eFluor® 650NC, PE-Alexa Fluor™ 647, (mCherry), 7-AAD, Propidium Iodide (PI) , SYTOX® ADvanced™ Dead Cell Stain
	'PE-Cy7'	735 LP + 780/60	Qdot® 800, PE-Cy7™ (PC7), PE-Alexa Fluor™ 750
633 nm red	'APC'	660/20	Alexa Fluor® 633 , Alexa Fluor® 635, Alexa Fluor® 647 , Alexa Fluor® 647–PE, APC, APC-Cy5™ , DyLight® 633, eFluor® 650NC, eFluor® 660, DRAQ5™ (DNA dye), SYTOX® Red Dead Cell Stain
	'APC-Cy7*'	735 LP + 780/60	Alexa Fluor® 750, APC-Cy7™ , Cy7™, DyLight® 750, APC-Alexa Fluor® 750, APC-eFluor® 780, APC-H7, APC-C750, DyLight® 755 Zombie NIR™ Fixable (viability), LIVE/DEAD® Fixable Near-IR Red
405 nm violet / 375 nm nearUV	'Hoechst Blue'	420/20	Alexa Fluor® 350, Alexa Fluor® 405 , Pacific Blue™ , DyLight® 350, Marina Blue®, AMCA (Aminomethylcoumarin) LIVE/DEAD® Fixable Blue, DAPI , Zombie UV™ Fixable (viability), SYTOX® Blue Dead Cell Stain
	'Hoechst Red'	610 LP + 670 LP	eFluor® 650NC, Brilliant™ Ultraviolet 737 (BUV737)