

Faculty of Medicine Flow Cytometry Facility - BD Fortessa X20 (special order system) 5 - laser Configuration

Laser	Detection Filter	Colours
Blue (488 nm)	530/30	FITC, BB5815, VioBright FITC, Alexa488, GFP, Venus, YFP
	710/50	PerCP, PerCP-Cy5.5™, PerCP-eFluor® 710, PE-Alexa Fluor™ 700, 7-AAD , Propidium Iodide (PI) , SYTOX® AADvanced™ Dead Cell Stain
Red (640 nm)	670/30	Alexa Fluor® 633, Alexa Fluor® 635, Alexa Fluor® 647, Alexa Fluor® 647-PE, Alexa Fluor® 660, APC, APC-Cy5™, Atto 647, Cy5™, DyLight® 647, Dyomics 647 (DY-647), Atto 655, DyLight® 633, DyLight® 649, HiLyte Fluor™ 647, DyLight® 650, TO-PRO®-3, DRAQ5™ (DNA dye),DRAQ7™ (DNA dye), SYTOX® Red Dead Cell Stain
	710/50	APC-Cy5™, APC-Cy5.5™, Atto 647, Cy5™, Alexa Fluor® 680, Alexa Fluor® 680-APC, Alexa Fluor® 700, Cy5.5™, Atto 680, Atto 700, DyLight® 680, APC-Alexa Fluor® 680, APC-Alexa Fluor® 700, RedFluor™ 710, DRAQ5™ (DNA dye), DRAQ7™ (DNA dye), Zombie NIR™ Fixable (viability)
	780/60	Alexa Fluor® 750, APC-Cy7™, Cy7™, Qdot® 800, Atto 700, DyLight® 750, APC-Alexa Fluor® 750, APC-eFluor® 780, APC-H7, HiLyte Fluor™ 750, APC-C750, DyLight® 755, redFluor™ 710, DRAQ5™ (DNA dye), Zombie NIR™ Fixable (viability), LIVE/DEAD®
Violet (405 nm)	450/50	Alexa Fluor® 405, Cascade Blue®, Pacific Blue™, Atto 390, Atto 425, DyLight® 405, eFluor® 450, Brilliant Violet 421™ (BV421™), Phalloidin, CF405M, Brilliant Violet 510™ (BV510™), Pacific Green™, violetFluor™ 450, LIVE/DEAD® Fixable Violet, DAPI, SYTOX®Blue Dead Cell Stain, Zombie Violet™ Fixable (Viability), Zombie Violet™ Fixable (Viability), Cyan Fluorescent Protein (CFP)
	525/50	Alexa Fluor® 430, EviTag® quantum dots - Adirondack Green (520 nm), EviTag® quantum dots - Catskill Green (540 nm), Qdot®525, Atto 390, Atto 425, Pacific Orange™, Cascade Yellow®, eFluor® 565NC, Orange Cytognos 515™ (OC-515), Krome Orange™, Brilliant Violet 510™ (BV510™), Pacific Green™, 7C, LIVE/DEAD® Fixable Aqua, DAPI, SYTOX® Blue Dead Cell Stain, Zombie Aqua™ Fixable (viability), Zombie Yellow™ Fixable, LIVE/DEAD® Fixable Yellow , Cyan Fluorescent Protein (CFP)
	610/20	Alexa Fluor® 430, EviTag® quantum dots - Fort Orange (600 nm), Qdot® 585, Qdot® 605, eFluor® 605NC, Qdot® 625, Pacific Orange™, Cascade Yellow®, Brilliant Violet 605™ (BV605™), Zombie Yellow™ Fixable, LIVE/DEAD® Fixable Yellow
	670/30	Qdot® 655, eFluor® 650NC, Brilliant Violet 650™ (BV650™)
	710/50	Qdot® 705, Brilliant Violet 711™ (BV711™)
	780/60	Qdot® 800, Brilliant Violet 785™ (BV785™)
Yellow/Green (561 nm)	586/15	Alexa Fluor® 546, Cy3™, PE, Rhodamine, Alexa Fluor® 568, Rhodamine Red-X, Rhodamine Red™, HiLyte Fluor™ 555, RD1 (Phycocerythrin), eFluor® 585NC
	610/20	Alexa Fluor® 568, PE-Texas Red (ECD), Alexa Fluor® 594, Rhodamine Red-X, Texas Red, eFluor® 605NC, PE-Alexa Fluor™ 610, Rhodamine Red™, PE-Dylight® 590, eFluor® 615, PE-Dazzle™ 594
	710/50	PE-Cy5.5™ (PC5.5), PE-Alexa Fluor™ 700, PE-Alexa Fluor™ 680, PE-Alexa Fluor™ 647, PE-Cy6™ (PC6)
	780/60	PE-Cy7™ (PC7), PE-Alexa Fluor™ 750
UV	379/29	Brilliant™ Ultraviolet 395 (BUV395)
	670/30 (Position B) - Configuration Filter	Brilliant™ Ultraviolet 661 (BUV661)
	730/45	Alexa Fluor® 350, Alexa Fluor® 405, Pacific Blue™, DyLight® 350, Marina Blue®, AMCA (Aminomethylcoumarin), Brilliant Violet 421™ (BV421™), LIVE/DEAD® Fixable Blue, DAPI, SYTOX® Blue Dead Cell Stain

Alternate Filters for UV Position B

UV	450/50	Alexa Fluor 350, AMCA, DAPI, Hoescht 33342, Hoescht 33258, Methyl Coumarin, FxCycle Violet, HCS Cell Mask Blue Stain, HCS Nuclear Mask Blue, LIVE/Dead Fixable Blue, Live/Dead ,Aqua, Lyso Sensor Yellow/Blue, Vybrant Dye Cycle Violet, INDO-1 (High),Zombie UV™ Fixable (viability)
	530/30	INDO - 1 Low
	515/30	BUV 496, Emerald 300, INDO- 1 Low
	560/30	BUV 563, Cascade Yellow

Notes on instrument start up and working with the UV laser

The UV laser is custom laser that is very expensive. Please turn it off after running the CST program, if it isn't necessary for your experiments. Please refer to the start up instructions posted at each of the instruments.

How to change filters:

- 1) Open the drawer on the left side of the cytometer. Press the black button so it pops out, then twist and turn to unlock the drawer and pull the drawer open
- 2) Remove The Filter in the UV detector array in position B (middle)
- 3) Replace the filter with your filter of choice
- 4) When finished your experiment, return the configuration set-up filter (670/30) to Position B

NOTE: CST must always be run with the configuration set-up filter (670/30).