

VBRI Flow Cytometry Core Lab

Available Instrumentation (2025)

Accuri

Laser	Detector BP (LP)	Parameter Name	Compatible Colors (not exhaustive)
488nm	533/30	FL1	FITC, BB515, AF488, CFSE, GFP, YFP
488nm	585/40	FL2	PE, JC-1, MitoStatus TMRE, OFP, PI
488nm	(670)	FL3	RFP, mCherry, PerCP, PE-Cy5, PE-Cy7
640nm	(670)	FL4	APC, AF647, MitoStatus Red

Celesta

Laser	Detector BP (LP)	Parameter Name	Compatible Colors (not exhaustive)
405nm	450/40	BV421	BV421, V450
405nm	525/50 (505)	BV510	BV510
405nm	610/20 (595)	BV605	BV605
405nm	670/30 (655)	BV5650	BV650
405nm	710/50 (690)	BV711	BV711
405nm	780/60 (750)	BV786	BV786
488nm	530/30 (505)	FITC	FITC, GFP, BB515, AF488
488nm	710/50 (690)	PerCP	PerCP, PerCP-Cy5.5, 7-AAD
488nm	780/60 (750)	PerCP-Cy7	PerCP-Cy7
561nm	586/15 (580)	PE	PE
561nm	610/20 (600)	PE-CF594	PE-CF594, PE-TexasRed
561nm	670/30 (635)	PE-Cy5	PE-Cy5
561nm	780/60 (750)	PE-Cy7	PE-Cy7
633nm	670/30 (665)	APC	APC, AF647
633nm	780/60 (750)	APC-Cy7	APC-Cy7

LSRII

Laser	Detector BP (LP)	Parameter Name	Compatible Colors (not exhaustive)
405nm	450/50	BV421	PacBlue, DAPI, AF405, V450, BV421
405nm	525/50 (505)	AmCyan	AmCyan, BV510, Aqua-Live/Dead
488nm	525/50 (505)	FITC	FITC, AF488, GFP, YFP
488nm	695/40 (685)	PerCP	PerCP, PerCP-Cy5.5, 7-AAD
561nm	575/26	PE	PE, PI, DSRed, AF555, mTomato
561nm	610/20 (595)	PE-TxRed	PE-TxRed, mCherry, RFP, AF594
561nm	660/40 (635)	PE-Cy5	PE-Cy5, 7AAD, Mitotracker red
561nm	710/50 (685)	PE-Cy5.5	PE-Cy5.5, PE-AF700
561nm	780/60 (755)	PE-Cy7	PE-Cy7
633nm	670/30	APC	APC, APC-Cy5, AF633, AF647
633nm	710/50 (685)	AF700	AF700, APC-Cy5.5
633nm	780/60 (755)	APC-Cy7	APC-Cy7, APC-AF750, APC-eFluor780

Symphony A5 SE

Laser	Detector BP (LP)	Parameter Name	Compatible Colors (not exhaustive)
355 nm	379/34 (365)	UV379	BUV395
355 nm	446/67 (425)	UV446	DAPI, BFP
355 nm	515/60 (495)	UV515	BUV496
355 nm	540/20 (535)	UV540	
355 nm	585/30 (570)	UV585	BUV563
355 nm	610/30 (595)	UV610	BUV615, PI
355 nm	660/30 (645)	UV660	BUV661
355 nm	695/40 (675)	UV695	
355 nm	736/64 (704)	UV736	BUV737
355 nm	809/82 (765)	UV809	BUV805
405nm	427/25 (415)	V427	BV421, V427
405nm	450/40 (430)	V450	V450, PacificBlue
405nm	470/15 (465)	V470	BV480, BFP, AmCyan
405nm	510/40 (495)	V510	BV510, V500
405nm	540/20 (530)	V540	PacificOrange
405nm	576/20 (570)	V576	BV570
405nm	595/30 (585)	V595	
405nm	615/25 (605)	V615	BV605
405nm	660/30 (665)	V660	BV650
405nm	680/30 (665)	V680	
405nm	710/40 (690)	V710	BV711
405nm	750/40 (730)	V750	BV750
405nm	785/50 (765)	V785	BV786
405nm	845/70 (810)	V845	
488nm	488/10	SSC	
488nm	510/20 (500)	B510	BB515, AF488, FITC, GFP, CFSE
488nm	537/32 (520)	B537	YFP, AF488*
488nm	576/20 (570)	B579	
488nm	602/40 (585)	B602	BB630-P2
488nm	660/30 (645)	B660	BB660-P2
488nm	675/20 (665)	B675	PerCP, PerCP-Cy5.5
488nm	710/50 (685)	B710	BB700, PerCP-Cy5.5
488nm	750/60 (724)	B750	BB755-P
488nm	810/79 (770)	B810	BB790-P
561nm	585/30 (570)	YG585	PE, BYG584-P, tdTomato
561nm	602/40 (595)	YG602	PE-CF594, mCherry, PI
561nm	660/30 (645)	YG660	PE-Cy5, 7-AAD
561nm	670/20 (665)	YG670	
561nm	695/40 (680)	YG695	PE-Cy5.5, DRAQ5, DRAQ7
561nm	730/50 (699)	YG730	
561nm	750/40 (735)	YG750	
561nm	780/60 (750)	YG780	PE-Cy7
561nm	825/49 (800)	YG825	
637nm	660/30 (645)	R660	APC, AF647
637nm	675/20 (665)	R675	
637nm	680/30 (680)	R680	DRAQ5, DRAQ7, APC-R700
637nm	710/25 (699)	R710	APC-R700
637nm	730/50 (720)	R730	AF700
637nm	780/60 (750)	R780	APC-Cy7, APC-H7, APC-Fire750

Instruments available 24/7 for trained users.

*Have questions about machines?
Looking to get trained?*

Contact: FlowCytometryCore@Versiti.org

ImageStream X

Channel	Filter (median λ /range)	Laser (nm)		
		405	488	642
1	457/45	DAPI, BV421, AF405, PacBlue		
2	533/55	BV510, PacOrange, eFluor525	FITC, GFP, YFP, Syto13, MitoTrackerGreen	
3	577/35	QD565, eFluor565	PE, DSRed, mOrange, SYTOX Orange	
4	610/30	BV605	PE-TexRed, PE-AF594, RFP	
5	702/85	eFluor700, BV711	PE-Cy5, 7AAD, PI, PerCP, DRAQ5	APC, AF647, DRAQ5, Cy5, PE-Cy5, PerCP
6	765/40	BV786	PE-Cy7, PE-AF750	APC-Cy7, APC-H7, APC-eFluor750, Cy7, PE-Cy7

Note: SSC can only be used on Ch6 (separate laser)

Note: Brightfield can be used on any channel

} highly recommended

Aria IIIu Sorter (specialist-operated)

Melody Sorter (user-operated)

Laser	Detector BP (LP)	Parameter Name	Compatible Colors (not exhaustive)	Laser	Detector BP (LP)	Parameter Name	Compatible Colors (not exhaustive)
405nm	450/40	BV421	AF405, BV421, DAPI, PacBlue, V450	405nm	448/45	BV421	V450, Pacific Blue, DAPI, BV421
405nm	530/30 (520)	AmCyan	AmCyan, BV520, PacOrange	405nm	528/45 (500)	BV510	V500, BV510, AmCyan
488nm	530/30 (520)	FITC	AF488, FITC, GFP, YFP	405nm	(755)	BV786	BV786
488nm	695/40 (655)	PerCP	PerCP-Cy5.5, PerCP-eFluor710	488nm	527/32 (507)	FITC	FITC, GFP, BV515, AF488
561nm	582/15	PE	DsRed, PE, PI, AF555, TdTomato	488nm	586/42 (560)	PE	PE, PI
561nm	610/20 (600)	RFP	PE-TxRed, AF568, mCherry, RFP	488nm	700/54 (665)	PE-Cy5	PE-Cy5, PerCP, PerCP-Cy5.5, 7-AAD
561nm	670/14 (630)	PE-Cy5	7-AAD, PE-Cy5, PE-Cy5.5	488nm	783/56 (752)	PE-Cy7	PE-Cy7
561nm	780/60 (735)	PE-Cy7	PE-Cy7, PE-AF700	633nm	660/10	APC	APC, AF647
633nm	670/30	APC	AF647, AF700, APC, AF633, APC	633nm	783/56 (752)	APC-Cy7	APC-Cy7, APC-H7
633nm	780/60 (735)	APC-Cy7	APC-Cy7, APC-H7, APC-Alexa750	633nm	720/30 (705)	AF700	AF700, APC-R700 (filter swap req.)