Sully (A5SE2): Laser and filter configuration

Symphony A5SE

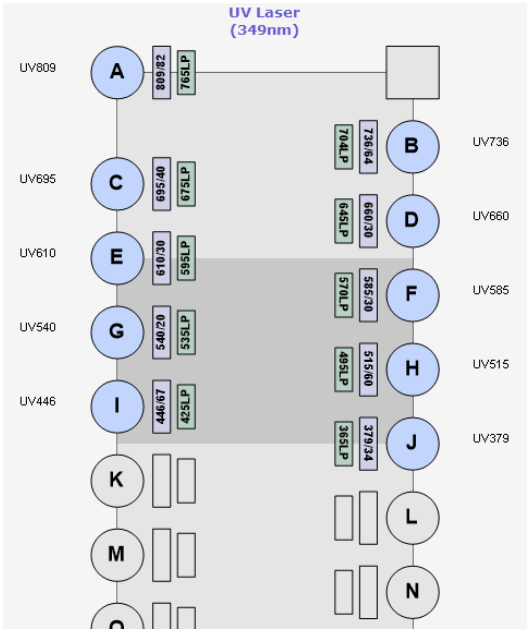
Laser	LP	BP	Parameter	Peak channel
349 nm 60 mW	365 LP	379/34	UV379	**BUV395**, Indo-1 (Ca2+ bound), AF350
	425 LP	446/67	UV446	**DAPI**, Live/Dead blue, Zombie UV
	495 LP	515/60	UV515	**BUV496**, Live/dead aqua, Indo-1, SBUV510
	535 LP	540/20	UV540	
	570LP	585/30	UV585	**BUV563**
	595 LP	610/30	UV610	**BUV615**
	645 LP	660/30	UV660	**BUV661**
	675 LP	695/40	UV695	
	704 LP	736/64	UV736	**BUV737**
	765 LP	809/82	UV809	**BUV805**
405 nm 200 mW	415 LP	427/25	V427	**BV421**, SV423
	430 LP	450/40	V450	**V450**,Pacific blue, eFluor 450, SB436, BFP
	465 LP	470/15	V470	**BV480**
	495 LP	510/40	V510	**BV510**, Horizon V500
	530 LP	540/20	V540	**AmCyan**, SparkViolet538
	570 LP	576/20	V576	**BV570**
	585 LP	595/30	V595	**BV605**
	605 LP	615/25	V615	**SB600**
	645 LP	660/30	V660	**BV650**, SB645
	665 LP	680/30	V680	
	690 LP	710/40	V710	**BV711**, SB702
	730 LP	750/40	V750	**BV750**
	765 LP	785/50	V785	**BV786,** SB780
	810 LP	845/70	V845	
488 nm 150 mW	500 LP	510/20	B510	**BB515**, FITC, GFP
	520 LP	537/32	B537	**AF488**, YFP, mVenus, SparkBlue550, RB545
	570 LP	576/20	B576	**Spark Blue 574**
	585 LP	602/40	B602	**BB630**, RB613
	645 LP	660/30	B660	**BB660**
	665 LP	675/20	B675	**PerCP**
	685 LP	710/50	B710	**BB700**, PerCP-e710, PerCP-Cy5.5, RB705
	724 LP	750/60	B750	**BB755**
	770 LP	810/79	B810	**BB790**, RB780
561 nm 150 mW	570 LP	585/30	YG585	**PE**, TdTomato, DsRed, RY586
	595 LP	602/40	YG602	**PE-CF594**, PE-Dazzle594, PE-e610, PI, mCherry, RFP, PE-TXRed
	645 LP	660/30	YG660	**PE-Cy5**, 7-AAD, PE-Fire640
	665 LP	670/20	YG670	
	680 LP	695/40	YG695	**PE-Cy5.5**, PE-Fire700
	699 LP	730/50	YG730	
	735 LP	750/40	YG750	
	750 LP	780/60	YG780	**PE-Cy7**
	800 LP	825/49	YG825	**PE-Fire810**, PE-Vio710
637 nm 140 mW	645 LP	660/30	R660	**Sytox Red**, TO-PRO-3
	665 LP	675/20	R675	**APC**, AF647, DRAQ-7
	680 LP	680/30	R680	**AF660**, DRAQ-5
	699 LP	710/25	R710	**APC-R700**, R718
	720 LP	730/50	R730	**AF700**, Live/Dead NIR
	750 LP	780/60	R780	**APC-Cy7**, APC-H7, APC-e780, APC-Fire810

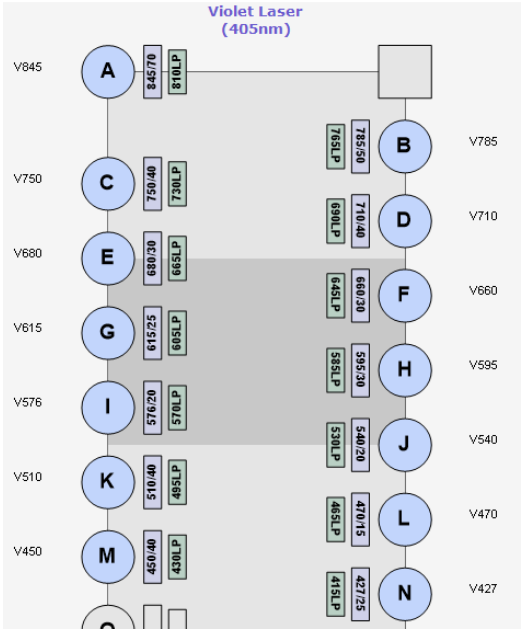
*PI and/or 7-AAD may be problematic depending on the panel

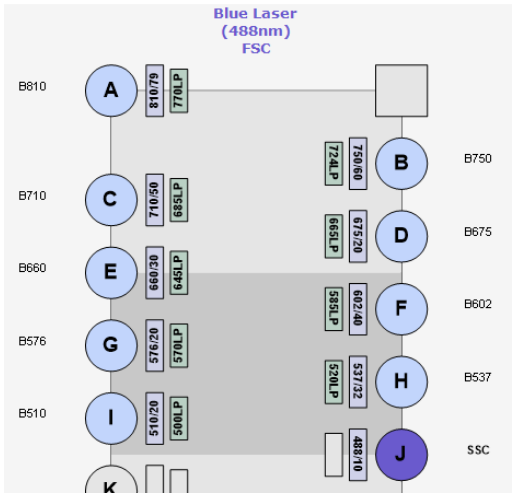
**Do not combine PerCP-Cy5.5 and PE-Cy5.5 in compensation mode

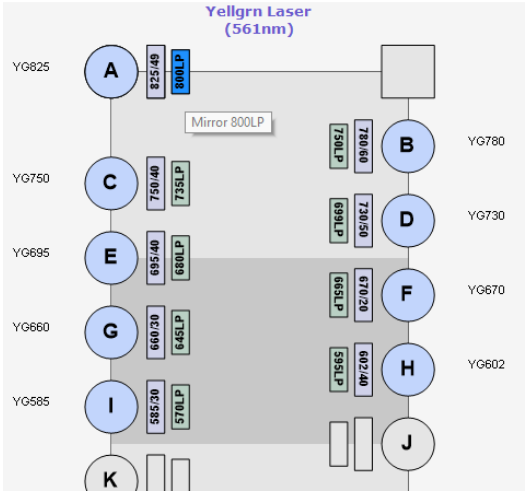
*** BOLD is common Fluor used

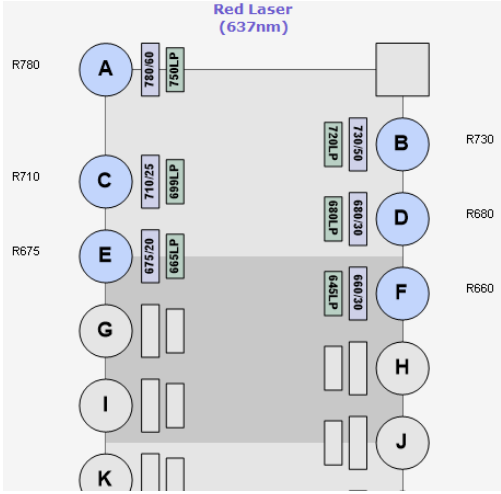
Sully (A5SE2): Laser and filter configuration diagram





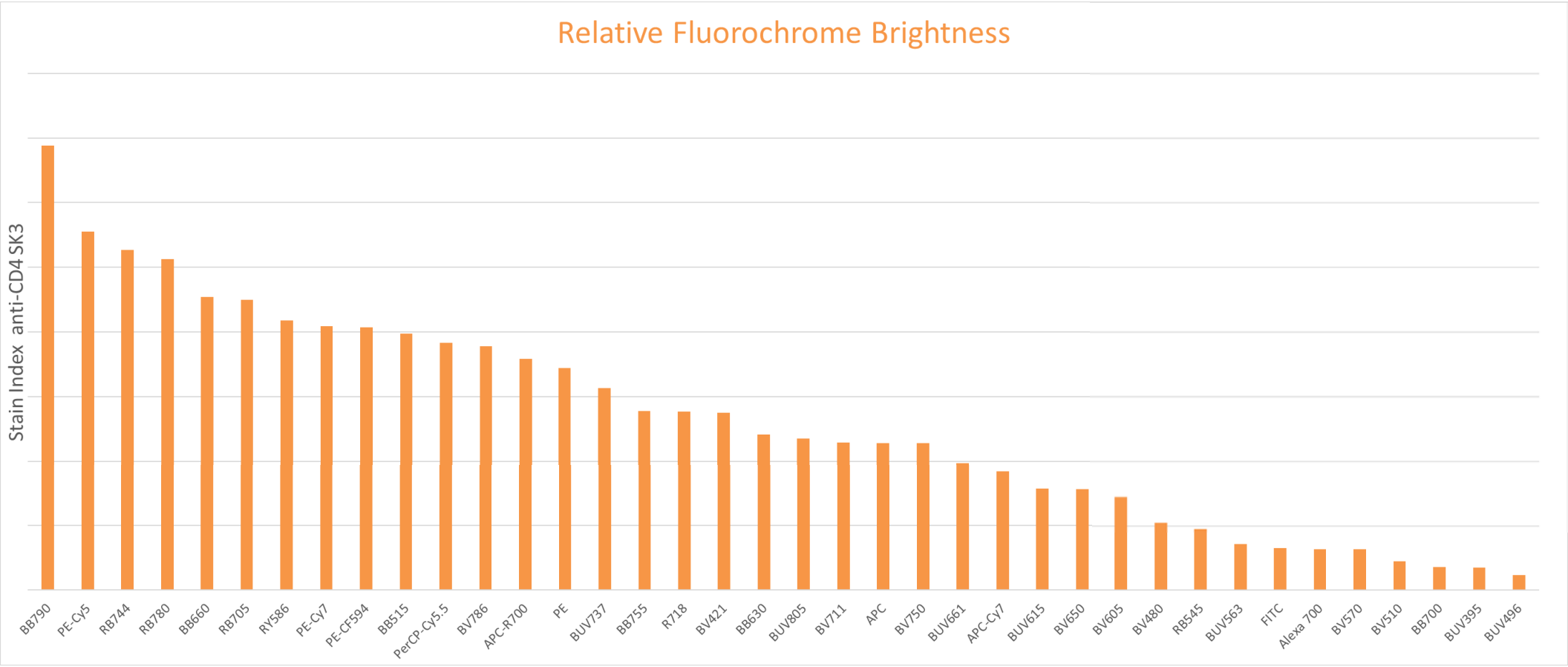






Cincinnati Children's Research Flow Cytometry Facility

Sully (A5SE2): Ranking of fluorochrome brightness



Stain indices and spread matrices were calculated by staining human PBMCs with anti-human CD4 (SK3 clone) conjugated to each of the fluors indicated at the optimal voltage settings in spectral mode. Voltage settings were optimized by voltration of unstained PBMCs.

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Sully (A5SE2): Total Spread Matrix (TSM)

TSM	B510-A	B537-A	B602-A	B660-A	B710-A	B750-A	B810-A	R675-A	R710-A	R730-A	R780-A	UV379-A	UV515-A	UV585-A	UV610-A	UV660-A	UV736-A	UV809-A	V427-A	V470-A	V510-A	V576-A	V615-A	V660-A	V710-A	V750-A	V785-A	YG585-A	YG602-A	YG660-A	YG825-A
BB515		490.847	217.02	156.272	35.0238	37.8976	19.8957	49.7313	54.3837	63.7625	0	0	41.3062	17.9332	30.9474	30.2497	0.651589	0	10.6964	0	31.9631	25.3568	174.671	49.328	25.2708	30.6017	20.959	33.8775	77.0171	24.4503	0
FITC		155.023	83.3532	44.4507	9.55519	12.3154	0	0	83.1948	51.5479	28.2622	0	24.6659	15.41	0	0	0	24.6694	0.650421	0	0	19.1397	64.9647	24.5903	16.2276	1.16957	16.7195	37.9758	0	0	10.6684
RB545	11.6342		96.9668	130.941	41.3535	31.5832	22.0468	36.3758	0	78.8091	33.8004	0	0	24.9331	46.5072	25.267	15.2082	17.2592	0.650421	0	0	0	94.0706	31.749	49.8976	32.5344	26.8455	50.7156	59.2249	21.1037	27.0946
BB630	11.4312	56.5453		517.783	192.61	174.058	85.6957	153.081	421.359	431.625	62.8163	0	14.3241	44.271	352.161	173.652	131.156	112.921	29.2454	0	0	73.2955	455.675	171.178	234.276	200.613	128.615	190.267	690.254	269.551	89.1328
BB660	0	42.4828	60.6616		300.053	296.752	166.071	510.123	1999.36	2468.6	409.924	0	14.0981	10.8284	70.9955	358.803	244.264	202.417	31.5345	0	0	19.1689	143.499	263.073	397.162	337.271	219.912	37.9775	85.7586	431.768	166.919
BB700	0	50.9461	64.9599	259.808		450.687	261.941	234.298	1659.31	1728.7	247.769	0	0	14.5191	46.5912	107.826	338.978	280.49	21.6622	0	0	28.2723	87.9323	81.5777	318.561	488.766	341.469	13.5174	47.1025	184.454	138.464
RB705	16.3367	66.2503	61.2494	114.989		903.95	541.695	140.141	2215.53	1965.94	277.248	0	14.4451	14.5609	0	34.7016	555.887	422.52	15.4283	0	0	12.4776	34.6347	26.3529	202.62	565.201	469.022	19.2224	34.6503	103.515	119.14
PerCP-Cy5_5	0	0	30.8075	64.2072		105.453	63.0497	65.9773	559.21	615.765	125.695	0	24.758	0	0	25.2307	91.7368	99.7724	0	0	0	0	19.0217	21.8335	120.19	142.116	102.096	0.684109	1.46692	46.2866	86.1899
BB755	0	48.217	99.1665	89.4791	93.5532		305.906	44.7841	528.244	674.783	142.851	0	35.8489	20.9146	33.9272	44.6498	213.478	334.364	15.3026	0.861582	0	31.5957	96.1172	40.7232	94.9043	398.491	412.417	33.8734	76.8409	17.0621	98.3922
RB744	29.1034	46.0626	0	46.7125	187.058		614.353	52.0277	1142.09	1215.23	286.53	0	14.2484	0.559492	0	1.02383	387.17	383.932	0	0	0	0	19.0545	24.5987	185.888	278.97	234.993	0	0	17.0185	121.45
BB790	0	63.2918	113.072	117.996	78.5287	434.847		51.3574	318.541	432.946	218.632	0	14.6007	23.538	71.4988	58.4976	151.008	832.621	38.0275	0	0	45.9644	105.59	40.7103	93.6533	467.502	1185.67	49.125	82.5217	21.1037	179.509
RB780	84.2595	88.5744	41.5921	32.073	54.1858	499.886		10.1922	239.773	387.477	174.015	0	0	0.979263	19.0194	19.2791	97.4451	483.246	0	0	0	0	48.7146	0	40.2031	181.372	348.745	0.542802	26.4206	0	171.722
APC	0	0	0	423.593	100.898	34.9495	71.7608		1366.62	1667.4	289.547	0	1.43492	0.559492	0	139.614	107.499	89.1186	0.650421	0	0	0	44.0951	113.065	97.3397	105.621	56.3561	0	26.4206	424.228	142.849
APC-R700	0	0	21.6313	140.744	84.3775	70.3668	132.476	205.746		4252.32	581.935	0	0	0	0	40.8354	200.816	171.956	0	0	0	0	48.7213	35.9947	118.864	168.627	123.41	28.3747	26.3991	127.629	343.202
AF700	0	19.2541	0	53.9007	29.6016	34.3279	53.1878	82.6329	1360.82		248.099	0	14.3679	14.5609	0	15.6338	110.953	84.585	0	0	0	0	1.50713	14.7667	60.0863	136.128	88.5266	23.6622	41.253	39.9944	122.556
R718	0	0	26.8321	48.8293	39.6486	36.5915	89.9081	97.6678	2340.1		479.06	0	20.0747	0	0	15.5916	138.821	159.775	0	0	0	0	39.1134	31.7261	70.1697	117.154	95.9183	24.4689	15.2076	66.1574	179.192
APC-Cy7	0	0	0	100.08	36.1405	44.4318	145.25	204.475	747.484	1271.11		0	32.2309	0	0	25.2307	62.0697	224.696	21.6318	0	0	23.7439	36.4185	27.0842	23.2571	144.699	191.687	0	30.6051	66.3529	366.979
BUV395	0	0	0	0	0	12.3108	9.52338	0	60.103	59.4022	12.3706		0	10.8136	0	19.2869	0	12.1179	0	0	0	0	13.3769	15.2166	0.839199	20.7954	11.7657	24.4626	1.78365	0	18.7574
BUV496	11.5313	32.2805	25.8723	0	0	8.61184	0	23.4949	0	93.0032	17.6077	0		46.0033	95.7837	50.06	29.4661	33.1711	14.9854	0	88.9499	27.6951	61.1435	24.5903	23.3307	24.1286	16.7325	55.2054	116.778	0	24.5591
BUV563	0	54.9158	163.948	162.688	42.984	28.0414	16.7939	68.9665	207.138	220.168	41.0428	0	0		278.934	139.524	84.6866	64.9952	0.923203	0	0	30.8129	178.173	45.3337	36.1178	11.738	20.5812	308.011	385.265	122.46	39.8433
BUV615	0	10.88	399.746	343.915	70.3496	48.9305	63.0264	151.779	420.452	649.003	77.7339	0	0	81.0418		292.812	214.201	217.536	21.5684	22.8728	0	47.1997	305.194	77.3559	88.5027	72.1935	43.2711	239.392	1156.51	344.623	128.307
BUV661	0	0	37.8729	380.165	73.1242	67.593	74.5655	529.426	1871.4	2043.49	325.832	0	0	0	82.8608		383.604	346.969	0	0	0	0	63.0686	109.053	110.254	131.448	79.4756	35.0326	123.016	412.242	145.924
BUV737	0	0	15.3761	37.3897	91.3089	250.425	153.312	79.1792	2201.37	3093.7	499.301	0	0	10.907	0	27.8187		594.863	0	13.0472	0	30.9175	36.4185	21.8335	97.3915	199.349	152.961	28.3786	26.4058	46.2222	156.634
BUV805	0	0	0	0	0	15.2459	44.5998	0	152.212	193.071	139.969	0	14.0981	10.8907	0	19.2715	37.8853		0	0	0	19.1689	0	24.5821	23.311	32.5906	101.661	31.8538	30.5832	0	96.3278
BV421	0	0	57.9523	12.772	0	0	0	0	46.9163	39.7985	12.3542	0	20.2402	27.5202	19.0643	27.8253	10.6865	0		103.792	252.775	69.854	50.9216	18.8029	23.3617	41.6065	1.35446	90.6628	54.4894	0	27.1008
BV480	52.0773	56.4924	118.529	50.869	0	12.3154	0	10.1888	99.9495	101.444	17.6146	0	109.265	42.37	102.566	40.8171	37.9231	27.7337	69.4119		412.779	191.266	192.319	68.4744	48.0845	47.6005	45.2852	150.545	135.598	0	18.772
BV510	0	0	82.6311	12.7669	0	20.0928	0	25.9263	114.446	123.639	12.3621	0	69.9055	65.9673	138.214	69.712	53.9556	46.6703	26.8476	51.8384		129.39	184.119	78.975	73.2069	89.4021	73.019	106.899	143.582	0	0.473842
BV570	0	0	134.758	132.519	28.5998	22.2387	22.0564	34.4427	132.513	136.505	12.3985	0	0	72.1222	143.974	78.9488	57.198	54.3578	78.3968	0	0		230.766	97.6001	88.5607	107.016	49.1435	195.47	267.93	125.096	48.9121
BV605	0	10.88	199.217	265.595	58.643	47.4546	62.9978	89.165	347.009	389.762	55.2794	0	13.9494	76.6056	288.126	201.101	170.881	165.213	73.8732	0	0	95.1832		198.265	199.334	254.126	186.938	226.132	552.855	258.419	122.943
BV650	0	0	66.1557	194.186	51.0083	42.913	44.6094	199.954	740.085	841.138	145.446	0	35.4175	10.907	100.669	349.349	207.323	195.345	89.8397	0	46.3046	23.6413	147.723		284.906	272.079	225.465	43.4066	132.761	229.94	81.771
BV711	0	0	14.8362	60.5645	81.6729	124.107	77.3962	86.328	1660.95	1680.71	346.397	0	0	15.4549	0	36.8283	520.101	385.979	92.618	0	0	19.1985	41.6539	31.7045		574.071	449.308	28.3653	26.3774	52.0658	116.011
BV750	0	22.2334	38.3673	0	24.3878	81.262	74.6308	10.1874	597.48	761.829	192.091	0	32.3084	10.859	19.1109	10.9732	324.878	442.514	53.5483	0	0	31.0299	41.6618	18.7833	119.702		506.017	24.4861	26.4465	0	74.2635
BV786	0	0	21.8268	12.772	0	61.9334	89.9847	0.246851	319.113	472.811	223.566	0	28.7084	0	13.4194	15.6329	182.071	1148.47	99.7954	0	9.46006	19.2591	41.6689	27.1387	48.1188	489.965		0	21.4752	0	115.843
PE	0	42.5351	566.913	418.218	89.9938	75.9386	50.9563	108.658	181.412	216.661	31.1498	0	0	141.795	181.242	75.8572	41.7182	21.3169	56.7313	0	0	260.229	492.619	134.231	92.986	60.4457	47.25		470.622	262.259	72.8612
RY586	0	22.3297	827.727	592.359	109.904	70.2747	110.015	138.688	188.259	154.711	11.5389	0	14.5227	69.1596	147.434	75.7793	54.5585	49.6167	21.9019	26.301	0	116.436	321.644	124.868	46.4444	61.7028	66.1841	0	1309.82	569.333	179.538
PE-CF594	0	15.5522	584.673	565.046	206.388	185.269	134.515	137.031	420.876	432.063	77.7741	0	1.43492	24.8762	247.116	128.627	105.955	93.8669	21.5933	0	0	59.9034	356.98	140.339	194.158	143.488	90.1155	281.729		482.91	210.713
PE-Cy5	0	0	75.1881	1392	417.388	365.435	319.025	552.542	1897.24	2223.93	441.43	0	0	0	18.9976	235.589	167.694	153.708	29.2575	0	0	36.8392	79.3486	224.661	369.323	233.021	148.381	97.2858	124.566		461.878
PE-Cy7	20.1676	1.01447	34.3051	46.661	49.5503	343.109	575.684	20.8542	287.902	421.218	254.155	0	0	15.4209	0	22.4121	85.9918	363.786	21.645	0	0	23.6919	59.1838	10.6753	35.9025	222.019	342.478	85.5748	76.1871	53.9015	
	B510-A	B537-A	B602-A	B660-A	B710-A	B750-A	B810-A	R675-A	R710-A	R730-A	R780-A	UV379-A	UV515-A	UV585-A	UV610-A	UV660-A	UV736-A	UV809-A	V427-A	V470-A	V510-A	V576-A	V615-A	V660-A	V710-A	V750-A	V785-A	YG585-A	YG602-A	YG660-A	YG825-A
Total	236.5412	1396.608	4383.207	7022.345	2677.89	5051.598	4496.928	4205.668	26982.85	31654.07	6553.598	0	606.2539	936.2817	2549.159	3034.311	5617.919	8342.572	958.4169	218.713	842.2317	1510.73	4411.784	2490.835	4152.406	6885.622	6720.748	2597.177	6504.194	4820.146	4504.893

- The TSM provides the measurement of total spread and is dependent on MFI (fluorochrome brightness and / or antigen density).
- TSM was developed specifically to measure total spread and aid panel design (TSM=SSM*√ Δ MFI).
- This TSM table was generated using CD4 stained single color.
- The TSM value will increase or decrease for antigens expressed at higher or lower levels than CD4.
- The same value across different rows will translate into the same amount of spread.

Sully (A5SE2): Spillover Spread Matrix (SSM)

SSM	B510-A	B537-A	B602-A	B660-A	B710-A	B750-A	B810-A	R675-A	R710-A	R730-A	R780-A	UV379-A	UV515-A	UV585-A	UV610-A	UV660-A	UV736-A	UV809-A	V427-A	V470-A	V510-A	V576-A	V615-A	V660-A	V710-A	V750-A	V785-A	YG585-A	YG602-A	YG660-A	YG825-A
BB515		1.5849	0.700738	0.504588	0.113088	0.122368	0.064241	0.160578	0.1756	0.205883	0	0	0.133374	0.057905	0.099926	0.097673	0.002104	0	0.034538	0	0.103206	0.081875	0.563996	0.159275	0.081597	0.09881	0.067675	0.109387	0.248681	0.078948	0
FITC		1.99638	1.07342	0.572435	0.123052	0.158597	0	0	1.07138	0.663832	0.363959	0	0.317647	0.198449	0	0	0	0.317692	0.008376	0	0	0.24648	0.836614	0.316673	0.208979	0.015062	0.215314	0.489051	0	0	0.137387
RB545	0.097049		0.808874	1.09228	0.344961	0.263459	0.18391	0.303438	0	0.657407	0.281955	0	0	0.207986	0.387952	0.210772	0.126863	0.143972	0.005426	0	0	0	0.784715	0.264843	0.416234	0.271394	0.223939	0.423058	0.49404	0.176042	0.226017
BB630	0.057225	0.283066		2.59202	0.964204	0.871337	0.428993	0.766321	2.10932	2.16071	0.314458	0	0.071706	0.22162	1.76292	0.869303	0.656568	0.565283	0.146402	0	0	0.366917	2.28111	0.856915	1.17279	1.00427	0.643847	0.952476	3.45541	1.34937	0.446199
BB660	0	0.132959	0.189853		0.93908	0.928749	0.519753	1.59654	6.25741	7.72602	1.28294	0	0.044123	0.03389	0.222196	1.12295	0.764477	0.633506	0.098694	0	0	0.059993	0.449112	0.823343	1.243	1.05556	0.688262	0.118859	0.2684	1.35131	0.52241
BB700	0	0.255529	0.325817	1.30311		2.2605	1.31381	1.17516	8.32254	8.67058	1.24273	0	0	0.072823	0.233686	0.54082	1.7002	1.40685	0.10865	0	0	0.141804	0.441039	0.409167	1.5978	2.45149	1.7127	0.067799	0.236251	0.92516	0.69449
RB705	0.056266	0.228176	0.210952	0.396038		3.11333	1.86567	0.482665	7.6306	6.77096	0.954881	0	0.049751	0.05015	0	0.119517	1.91455	1.45522	0.053137	0	0	0.042975	0.119287	0.090763	0.697853	1.94663	1.61538	0.066205	0.119341	0.356519	0.410334
PerCP-Cy5_5	0	0	0.594976	1.24001		2.03659	1.21766	1.2742	10.7999	11.8921	2.42751	0	0.478143	0	0	0.487273	1.77169	1.92687	0	0	0	0	0.36736	0.421663	2.32119	2.74464	1.97175	0.013212	0.02833	0.893918	1.66456
BB755	0	0.300767	0.618578	0.55815	0.583564		1.90817	0.279353	3.29506	4.20914	0.891071	0	0.223617	0.13046	0.21163	0.278515	1.33162	2.08569	0.095454	0.005374	0	0.197087	0.599557	0.254022	0.591992	2.4857	2.57256	0.211294	0.479316	0.10643	0.613748
RB744	0.094276	0.149213	0	0.151318	0.605946		1.9901	0.168536	3.69962	3.93656	0.92817	0	0.046155	0.001812	0	0.003317	1.25418	1.24369	0	0	0	0	0.061724	0.079684	0.602155	0.903679	0.761223	0	0	0.055129	0.393418
BB790	0	0.280182	0.50055	0.522346	0.347633	1.92499		0.22735	1.41013	1.91658	0.967847	0	0.064635	0.104199	0.316513	0.258959	0.668487	3.68587	0.168341	0	0	0.203477	0.467429	0.180218	0.414587	2.06955	5.24875	0.217468	0.365309	0.093423	0.794655
RB780	0.315326	0.331474	0.155651	0.120028	0.202781	1.87074		0.0381425	0.897307	1.45006	0.65122	0	0	0.003665	0.071177	0.072149	0.364671	1.80846	0	0	0	0	0.182306	0	0.150453	0.678754	1.30512	0.002031	0.098874	0	0.642639
APC	0	0	0	3.36652	0.801893	0.277763	0.570322		10.8613	13.2518	2.30119	0	0.011404	0.004447	0	1.10959	0.854351	0.708274	0.005169	0	0	0	0.350448	0.898591	0.773612	0.83943	0.447893	0	0.209979	3.37157	1.1353
APC-R700	0	0	0.078883	0.51325	0.307698	0.256606	0.483097	0.750292		15.5069	2.12213	0	0	0	0	0.148914	0.732313	0.627071	0	0	0	0	0.177671	0.131261	0.433459	0.614931	0.450039	0.103474	0.096269	0.465421	1.25155
AF700	0	0.133495	0	0.373713	0.205239	0.238008	0.36877	0.572923	9.43506		1.72015	0	0.099618	0.100956	0	0.108394	0.769277	0.586457	0	0	0	0	0.01045	0.102383	0.4166	0.943822	0.613786	0.164059	0.286022	0.277295	0.849722
R718	0	0	0.109518	0.199303	0.161831	0.149352	0.36697	0.398643	9.55139		1.95534	0	0.081937	0	0	0.063639	0.566613	0.65214	0	0	0	0	0.159646	0.129494	0.286406	0.478179	0.391502	0.099873	0.062072	0.270029	0.731394
APC-Cy7	0	0	0	0.52601	0.189951	0.23353	0.763423	1.0747	3.92871	6.68083		0	0.169403	0	0	0.13261	0.326233	1.18098	0.113695	0	0	0.124796	0.191413	0.142352	0.122237	0.760525	1.00749	0	0.160858	0.348745	1.92881
BUV395	0	0	0	0	0	0.131631	0.101827	0	0.642642	0.635149	0.13227		0	0.115623	0	0.206222	0	0.129569	0	0	0	0	0.14303	0.162701	0.008973	0.222352	0.125803	0.261562	0.019071	0	0.200561
BUV496	0.182926	0.512082	0.410425	0	0	0.136614	0	0.372711	0	1.47535	0.279319	0		0.729772	1.51946	0.794126	0.467435	0.526209	0.237721	0	1.41105	0.43934	0.969949	0.390088	0.370106	0.382764	0.265435	0.875749	1.8525	0	0.389593
BUV563	0	0.577145	1.72303	1.7098	0.451746	0.294705	0.176498	0.724813	2.17694	2.31388	0.431345	0	0		2.9315	1.46635	0.890025	0.683076	0.009703	0	0	0.323833	1.87253	0.47644	0.379584	0.123362	0.216301	3.23708	4.049	1.287	0.418739
BUV615	0	0.055115	2.02501	1.74218	0.356373	0.247869	0.319276	0.768871	2.1299	3.28768	0.39378	0	0	0.410537		1.48331	1.08509	1.10198	0.10926	0.115868	0	0.239101	1.54603	0.391865	0.448332	0.365713	0.2192	1.2127	5.8586	1.74577	0.649969
BUV661	0	0	0.205958	2.06739	0.39766	0.36758	0.405498	2.87909	10.1769	11.1128	1.77192	0	0	0	0.450609		2.08609	1.88686	0	0	0	0	0.342976	0.593047	0.599577	0.714831	0.432199	0.190512	0.66898	2.24183	0.793558
BUV737	0	0	0.064697	0.157322	0.384195	1.0537	0.645082	0.333158	9.26257	13.0172	2.10088	0	0	0.045893	0	0.117051		2.50297	0	0.054898	0	0.13009	0.153236	0.091868	0.409789	0.83879	0.643606	0.119407	0.111106	0.194486	0.659061
BUV805	0	0	0	0	0	0.073223	0.214204	0	0.731044	0.927283	0.67224	0	0.06771	0.052306	0	0.092557	0.181955		0	0	0	0.092064	0	0.118063	0.111958	0.156526	0.488257	0.152987	0.146885	0	0.462643
BV421	0	0	0.288434	0.063567	0	0	0	0	0.233507	0.198081	0.061488	0	0.100737	0.13697	0.094885	0.138489	0.053188	0		0.516582	1.25808	0.34767	0.253441	0.093584	0.116274	0.207079	0.006741	0.451237	0.271199	0	0.134883
BV480	0.494192	0.536089	1.12479	0.482726	0	0.116868	0	0.0966871	0.948479	0.962665	0.167156	0	1.03688	0.402074	0.973313	0.387338	0.359875	0.263181	0.65869		3.9171	1.81503	1.82503	0.649793	0.456302	0.451709	0.429738	1.42861	1.28677	0	0.178138
BV510	0	0	0.899898	0.139038	0	0.218822	0	0.282352	1.24638	1.3465	0.13463	0	0.761309	0.71842	1.50522	0.759202	0.587606	0.508265	0.292384	0.564548		1.40913	2.00516	0.860081	0.797263	0.973638	0.795217	1.16419	1.56369	0	0.00516
BV570	0	0	1.64911	1.62172	0.349993	0.272148	0.269917	0.421496	1.62164	1.67049	0.151727	0	0	0.882602	1.76189	0.966144	0.699966	0.665208	0.959388	0	0		2.82402	1.19439	1.08377	1.30962	0.601398	2.39209	3.27882	1.53088	0.598567
BUV605	0	0.065501	1.19936	1.59898	0.353053	0.285694	0.37927	0.536807	2.08913	2.34651	0.332803	0	0.083981	0.461194	1.73463	1.21071	1.02877	0.994645	0.444744	0	0	0.573038		1.19363	1.20006	1.52994	1.12544	1.3614	3.32839	1.55578	0.740163
BUV650	0	0	0.534119	1.56779	0.411824	0.346465	0.360161	1.61436	5.97519	6.79106	1.17428	0	0.285949	0.08806	0.812769	2.82053	1.67385	1.57715	0.725335	0	0.373848	0.190872	1.19266		2.30024	2.19667	1.82033	0.35045	1.07186	1.85646	0.660191
BV711	0	0	0.07671	0.313146	0.422286	0.641691	0.400173	0.446355	8.58787	8.69002	1.79103	0	0	0.079909	0	0.190419	2.68915	1.99568	0.478877	0	0	0.099265	0.21537	0.163927		2.96821	2.32312	0.146661	0.136383	0.269204	0.599827
BV750	0	0.104619	0.180538	0	0.114757	0.382379	0.351176	0.0479369	2.81145	3.58479	0.903884	0	0.152027	0.051097	0.089927	0.051634	1.52871	2.08225	0.251972	0	0	0.146011	0.19604	0.088385	0.563256		2.38107	0.11522	0.124444	0	0.349447
BV786	0	0	0.078758	0.046085	0	0.223476	0.324694	8.90E-04	1.15146	1.70606	0.806696	0	0.103589	0	0.048421	0.056408	0.656972	4.14403	0.360094	0	0.034135	0.069493	0.150355	0.097925	0.173628	1.76795		0	0.07749	0	0.418
PE	0	0.222885	2.97065	2.19148	0.471571	0.397921	0.267013	0.569371	0.950605	1.13531	0.163226	0	0	0.743014	0.949714	0.397495	0.218605	0.111701	0.297274	0	0	1.36361	2.58135	0.703377	0.48725	0.316738	0.247592		2.46608	1.37425	0.381796
RY586	0	0.070565	2.61574	1.87194	0.347311	0.222078	0.347663	0.438275	0.594927	0.488911	0.036465	0	0.045894	0.218554	0.465911	0.239473	0.172413	0.156796	0.069213	0.083115	0	0.367954	1.01644	0.394602	0.146771	0.19499	0.209151		4.13922	1.79918	0.567367
PE-CF594	0	0.056016	2.10588	2.03519	0.74337	0.667305	0.484496	0.493561	1.51592	1.55621	0.280128	0	0.005168	0.089599	0.890067	0.463288	0.381629	0.338091	0.077775	0	0	0.215761	1.28577	0.505476	0.69932	0.516816	0.324579	1.01473		1.73935	0.758948
PE-Cy5	0	0	0.257098	4.75979	1.42721	1.24957	1.09088	1.88936	6.48743	7.6045	1.50943	0	0	0	0.064961	0.805575	0.573412	0.52559	0.100043	0	0	0.125968	0.271325	0.768206	1.26286	0.796793	0.507373	0.332659	0.425941		1.57934
PE-Cy7	0.072417	0.003643	0.123181	0.167548	0.177923	1.23202	2.06714	0.074882	1.03378	1.51249	0.912606	0	0	0.055372	0	0.080476	0.308775	1.30626	0.077722	0	0	0.085071	0.212514	0.038332	0.128917	0.797214	1.22975	0.307277	0.273569	0.193547	

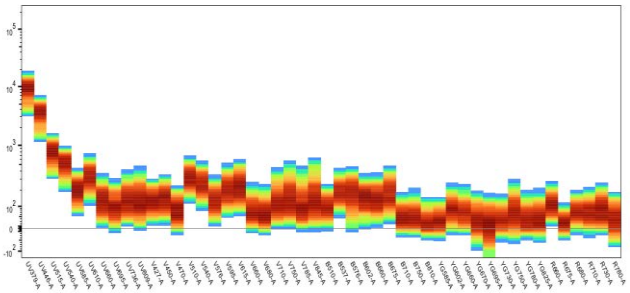
**To read this table: spread of fluor in the row impacts resolution of the fluor in the column. Red means the fluor in that row has significant spread into the dye in the column.

- The SSM is independent of MFI (fluorochrome brightness and / or antigen density). MFI is normalized in the SSM formula, in order to assess instrument performance independent of MFI.
- SSM was originally developed to monitor instrument performance (SSM=ΔrSD/√ Δ MFI).

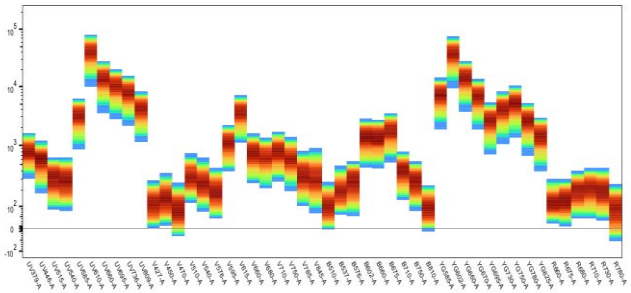
Cincinnati Children's Research Flow Cytometry Facility

Fluors with primary UV (349 nm) excitation

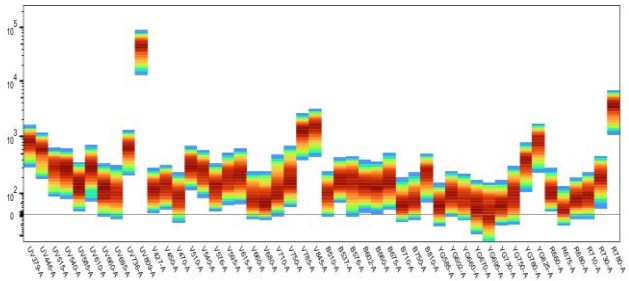
BUV395



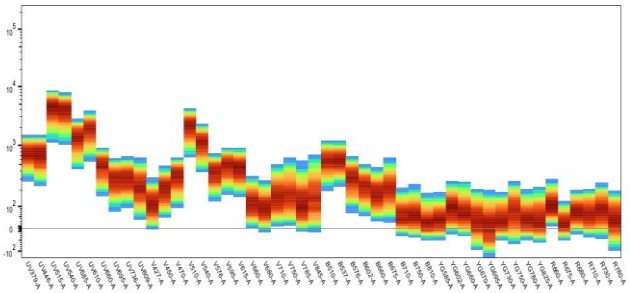
BUV615



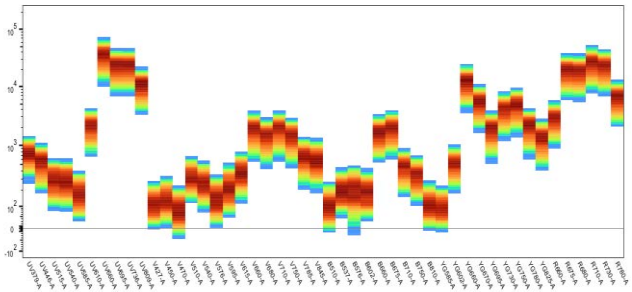
BUV805



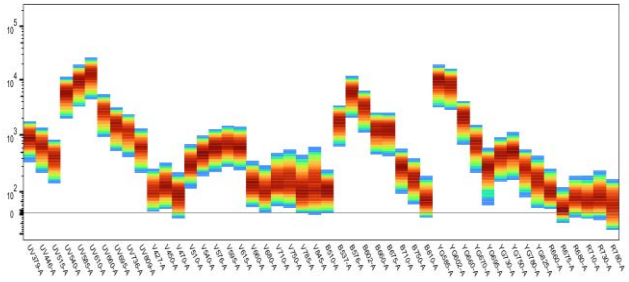
BUV496



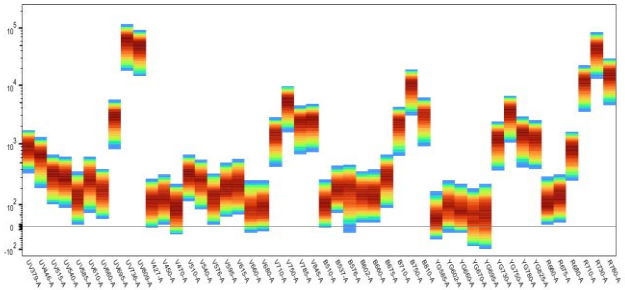
BUV661



BUV563

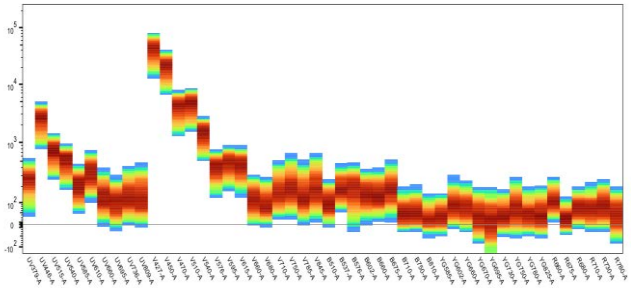


BUV737

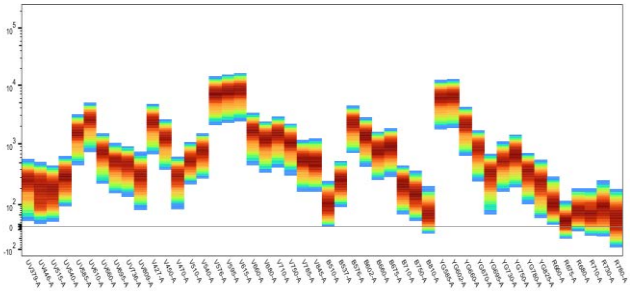


Fluors with primary Violet (405 nm) excitation

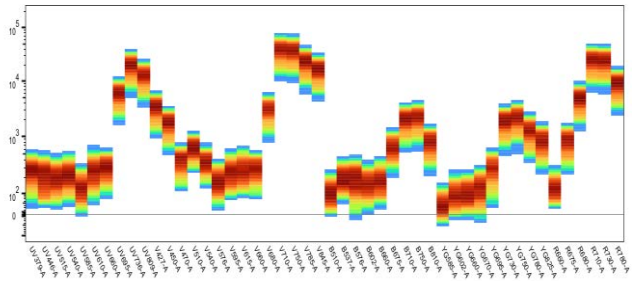
BV421



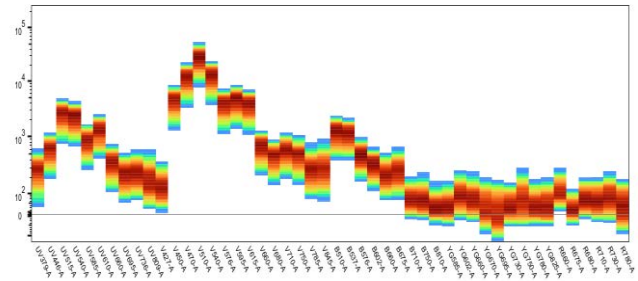
BV570



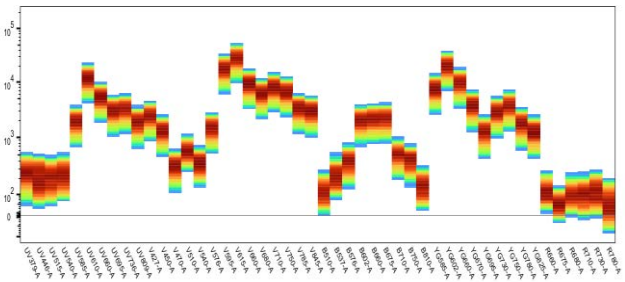
BV711



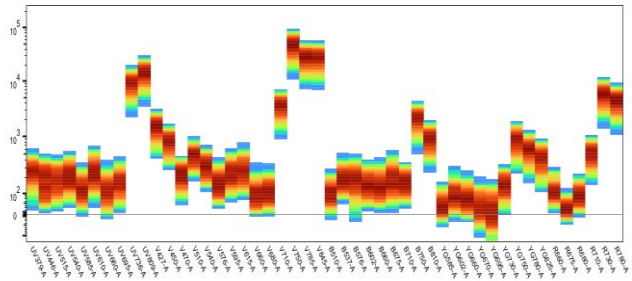
BV480



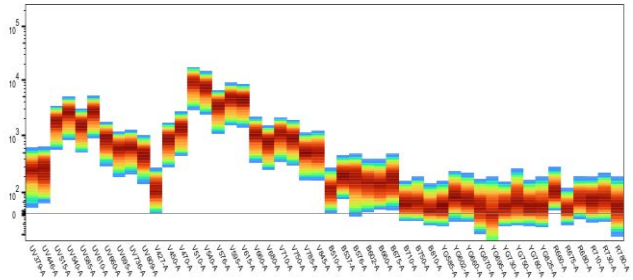
BV605



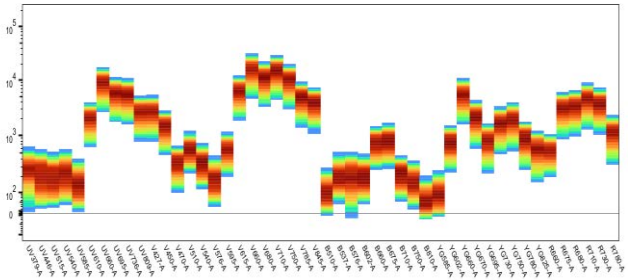
BV750



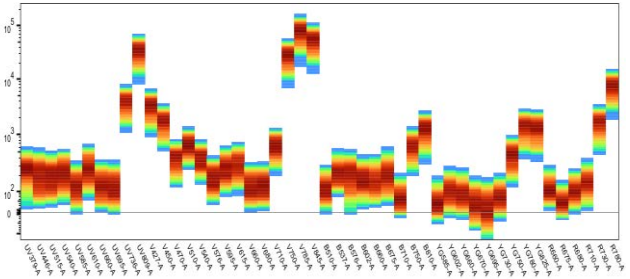
BV510



BV650

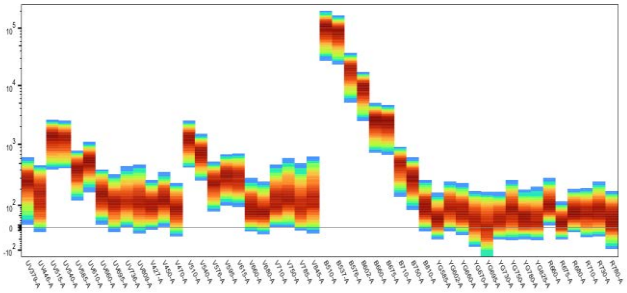


BV786

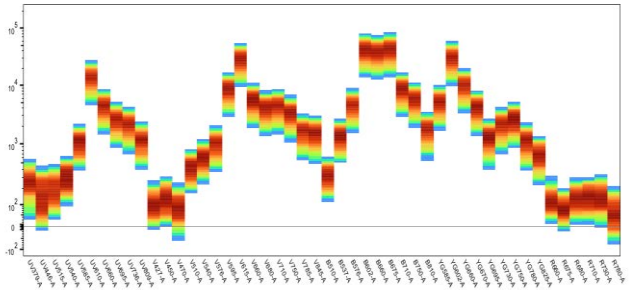


Fluors with primary **Blue (488 nm)** excitation

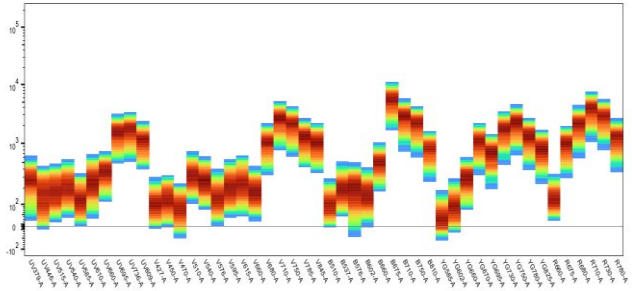
BB515



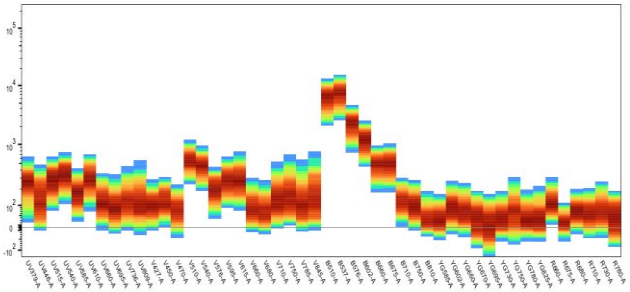
BB630



PerCP_Cy5.5



FITC



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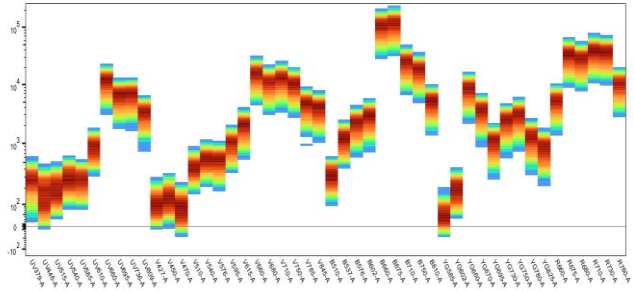

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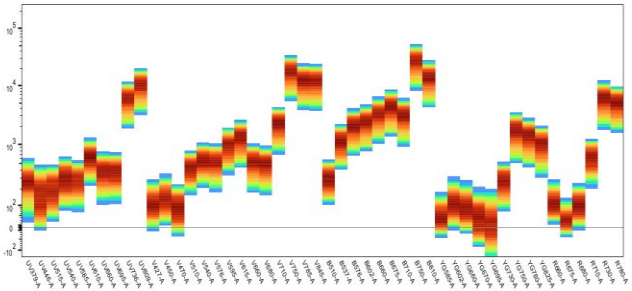

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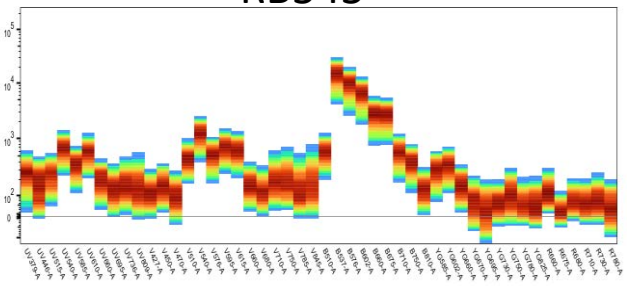

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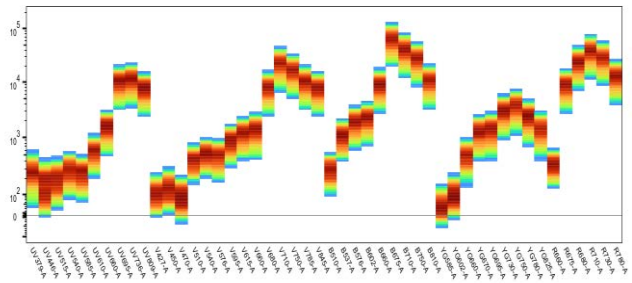

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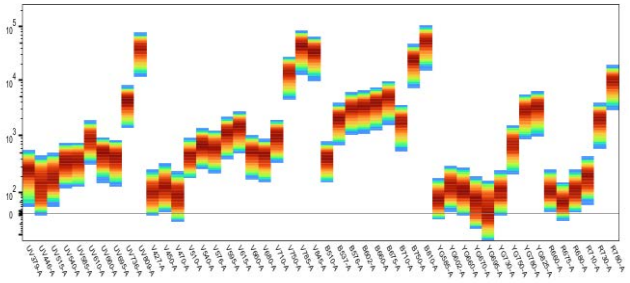
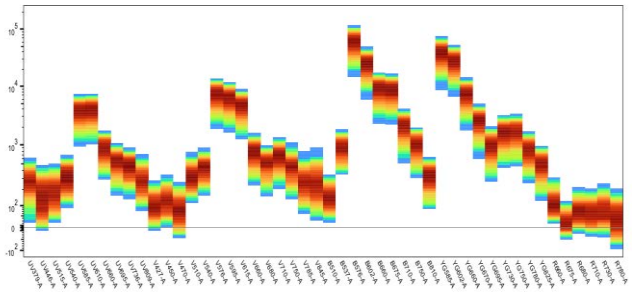
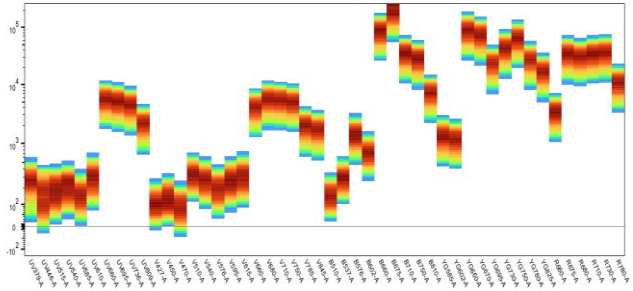


Fluors with primary Yellow-Green (561 nm) excitation

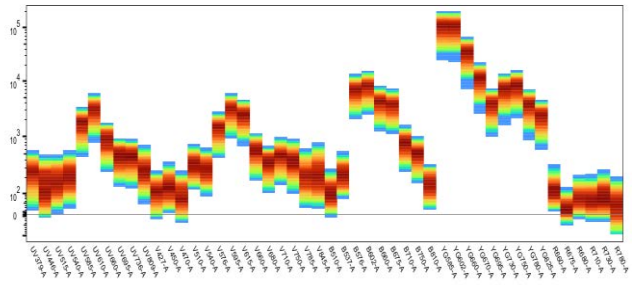
PE



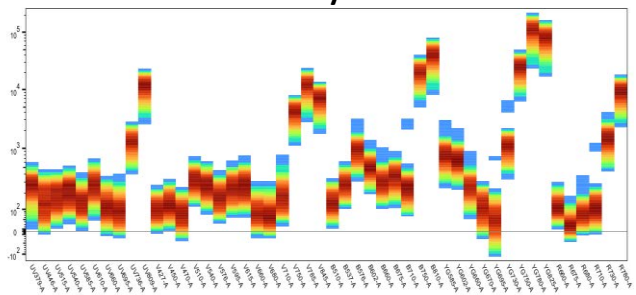
PE-Cy5



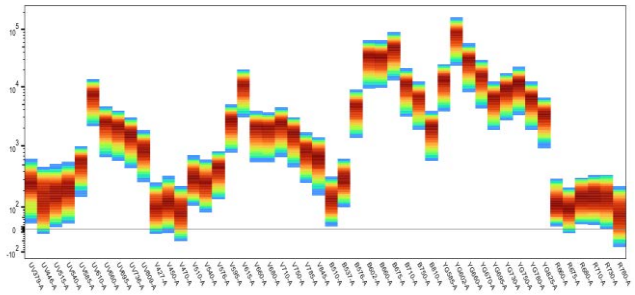
RY586



PE-Cy7

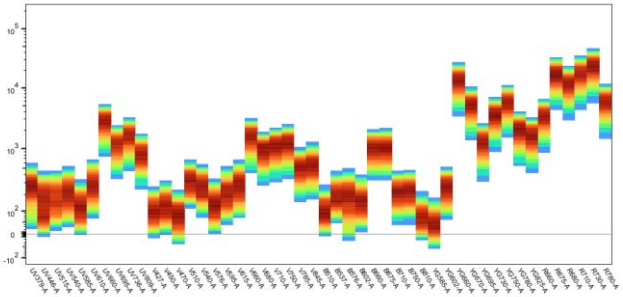


PE-CF594

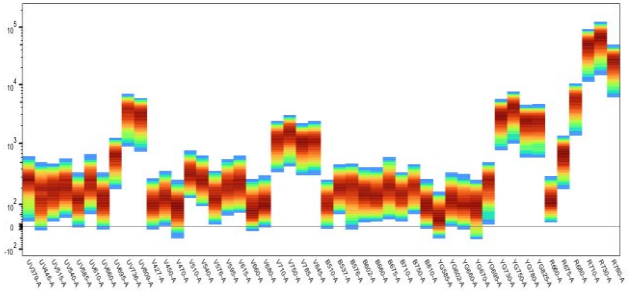


Fluors with primary **Red (537 nm)** excitation

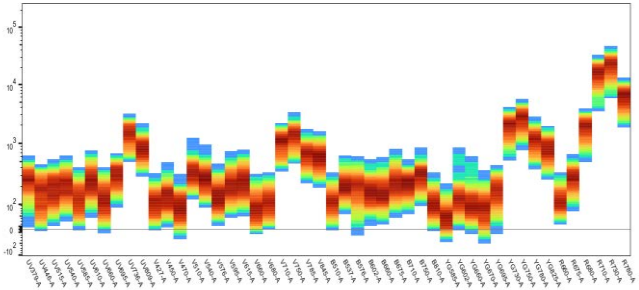
APC



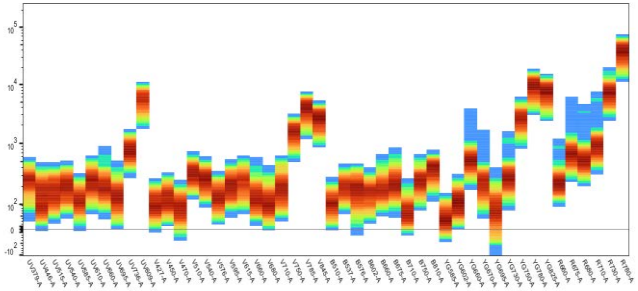
R718



AF700



APC-Cy7



APC-R700