

Lasers and Filters at the NovoCyte Quanteon Flow Cytometer

May 2021. Facs Core Facility, Aarhus University.

405 nm laser Violet

		Pacific Blue	V450																
		Hoechst Blue	AF405			SBV610		SBV670						SNV786					
		eF450	BV421			Qdot625		Qdot655						Qdot800					
		DAPI	SBV440			BV605		BV650		Qdot705		SB702		SB780					
		SNV428	SB436			SBV515		BV570		SNV605		BV711		BV785					
		445/45				530/30		586/20		615/20		660/20		685-705		725/40		757-810	
		V445				V530		V586		V615		V660		V695		V725		V780	
350	355	360	365	370	375	380	385	390	395	400	405	410	415	420	425	430	435	440	445
450	455	460	465	470	475	480	485	488	495	500	505	510	515	520	525	530	535	540	545
550	555	560	565	570	575	580	585	590	595	600	605	610	615	620	625	630	635	640	645
650	655	660	665	670	675	680	685	690	695	700	705	710	715	720	725	730	735	740	745
750	755	760	765	770	775	780	785	790	795	800	805	810	815	820					

SNV = Super Nova Violet
 AF = Alexa Flour
 BV = Brilliant Violet
 eF = eFlour
 NB = Nova Blue
 SB = Super Bright
 SBV = Star Bright Violet
 V450 = BD Horizon V450
 BB = Brilliant Blue

488 nm laser Blue

		FITC	SYTO 9																
		Vio515	GFP			BB700		PerCP-Cy5.5		PerCP-eF710									
		BB515	CFSE			NB 610/70s		PerCP-Cy5.5*		PE-AF700*		PE-Cy7*							
		YFP	AF488			PE*		PI**		7-AAD***		PE-Cy5.5*		PE-AF700*		PE-Cy7*			
		NB530	eF520			530/30		586/20		615/20		660/20		685-705		725/40		757-810	
		B530				B586		B615		B660		B695		B725		B780			
350	355	360	365	370	375	380	385	390	395	400	405	410	415	420	425	430	435	440	445
450	455	460	465	470	475	480	485	488	495	500	505	510	515	520	525	530	535	540	545
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650	655	660	665	670	675	680	685	690	695	700	705	710	715	720	725	730	735	740	745
750	755	760	765	770	775	780	785	790	795	800	805	810	815	820					

* PE - and PE tandems - will be excited with 61,6% efficiency from the blue laser and with 94,3% efficiency from the yellow-green laser
 ** PI will be excited with 41,4% efficiency from the blue laser and with 58,1% efficiency from the yellowgreen laser
 *** 7-AAD: 57,4% from blue and 91,2% from yellowgreen laser

561 nm laser YellowGreen

		PE	TRFP																
		DyLight550	mCherry			PE-Vio615		PE-Cy5		PE-Cy5.5		PE-AF700		PE-Cy7					
		tdTomato	PE-CF594			PI		7-AAD		PE-Cy5.5		PE-AF700		PE-Vio770					
		Asred	PE-CF594			586/20		615/20		660/20		685-705		725/40		757-810			
		Cy3	PE-CF594			Y586		Y615		Y660		Y695		Y725		Y780			
350	355	360	365	370	375	380	385	390	395	400	405	410	415	420	425	430	435	440	445
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750	755	760	765	770	775	780	785	790	795	800	805	810	815	820					

*** We do not recommend using PerCP on the Quanteon: only 13% of the emmission peak falls within the B695 filter

637 nm laser Red

		APC	AF670																
		eF660	DyLight633	AF680	AF700														
		DyLight633	AF647	DRAQ7	DRAQ7														
		AF647	DRAQ7	DRAQ7	DRAQ7														
		660/20	685-705	725/40	757-810														
		R660	R695	R725	R780														
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