



## Dye List

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Fluorescent Dyes	Peak Excitation (nm)	Peak Emission (nm)	Lighting (1st choice)	Lighting (2nd choice)	Lighting (3rd choice)	Filter (1st choice)	Filter (2nd choice)	Filter (3rd choice)	Filter (4th choice)	Filter (5th choice)	Spectrally Similar Dyes
AlexaFluor 350	346	442	Tlum MW or LW	epi UV MW/LW	HILED UV	Filt 440					
AlexaFluor 405	401	421	Tlum LW	epi LW	HILED UV	Filt 440					
AlexaFluor 430	433	541	Tlum LW	Blue (M)	HILED UV	UV06/032	Filt 525				
AlexaFluor 488	496	519	Blue (M)	Tlum LW	Cy2 edge (for 2D gel)	Filt 525	SW06/032	Cy2 (for edge lighting)			
AlexaFluor 532	532	553	Green (M)	Cy3 edge (for 2D gel)		Filt 605 (M)	Cy3 (for edge lighting)				
AlexaFluor 546	556	573	Green (M)	Cy3 edge (for 2D gel)		Filt 605 (M)	Cy3 (for edge lighting)				
AlexaFluor 555	555	565	Green (M)	Cy3 edge (for 2D gel)		Filt 605 (M)	Cy3 (for edge lighting)				
AlexaFluor 568	578	603	Green (M)	Cy3 edge (for 2D gel)		Filt 605 (M)	Cy3 (for edge lighting)				
AlexaFluor 594	590	617	Green (M)	Cy3 edge (for 2D gel)		Filt 605 (M)	Cy3 (for edge lighting)				
AlexaFluor 610	612	628	Red (M)	Cy5 edge (for 2D gel)		Filt 705 (M)	Cy5 (for edge lighting)				
AlexaFluor 633	632	647	Red (M)	Cy5 edge (for edge lighting)		Filt 705 (M)	Cy5 (for edge lighting)				
AlexaFluor 647	650	665	Red (M)	Far Red	Cy5 edge (for 2D gel)	Filt 705 (M)	Filt LY700	Cy5 (for edge lighting)	FRLP (if not multiplexing)		
AlexaFluor 660	663	690	Red (M)	Cy5 (for edge lighting)		Filt 705 (M)	Cy5 (for edge lighting)				
AlexaFluor 680	679	702	Red (M)	Far Red	Cy5 edge (for 2D gel)	Filt 705 (M)	Filt LY700	Cy5 (for edge lighting)			
AlexaFluor 700	702	723	Far Red	Red (M) LED		Filt LY700	Filt 705 (M)				
AlexaFluor 750	749	775	IR740 (M)	Far Red		Filt LY800	Filt LY700				
AlexaFluor 790	784	814	IR740 (M)			Filt LY800					
AMCyan	457	489	Tlum LW	epi UV (LW)	HILED UV	UV06/032					
Aminocoumarin	350	445	Tlum MW	epi UV (MW)	HILED UV	Filt 440					
APC-Cy7	650	774	Red (M)	Far Red	IR740 (M)	Filt 705 (M)	Filt LY700	Filt LY800			
Bodipy FL	503	512	Tlum MW	Blue Converter Screen (for UV filter)	Blue Transilluminator (for UV filter)	SW06/032	UV06/032				



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Dylight 680	692	712	Far Red	Red (M)	Cy5 edge (for 2D gel)	Filt LY700	Filt 705 (M)	Cy5 (for edge lighting)			AlexaFluor 680, Cy5.5
Dylight 755	754	776	IR740 (M)			Filt LY800					AlexaFluor 750
Dylight 800	777	794	IR740 (M)			Filt LY800					IR Dye 800
FITC (Fluorescein)	490	525	Blue (M)	Cy2 edge (for 2D gel)		SW06/032	Filt 525	Cy2 (for edge lighting)			
HiLyte Fluor 405	404	428	Tlum LW	epi UV (LW)	HILED UV	Filt 440					
HiLyte Fluor 488	501	527	Blue (M)			Filt SW525					
HiLyte Fluor 555	550	566	Green (M)	Cy3 edge (for 2D gel)		Filt 605 (M)	Cy3 (for edge lighting)				
HiLyte Fluor 594	593	616	Green (M)	Cy3 edge (for edge lighting)		Filt 605 (M)	Cy3 (for edge lighting)				
HiLyte Fluor 647	650	675	Red (M)	Cy5 edge (for edge lighting)		Filt 705 (M)	Cy5 (for edge lighting)				
HiLyte Fluor 680	678	699	Far Red	Red (M)		Filt LY700	Filt 705 (M)				
HiLyte Fluor 750	753	778	IR740 (M)			Filt LY800					
IR Dye 680	680	694	Far Red	Red (M)		FiltLY700	Filt 705 (M)				
IR Dye 700X	680	687	Far Red	Red (M)		FiltLY700	Filt 705 (M)				
IR Dye 800	778	794	IR740 (M)			Filt LY800					
IR Dye 800CW	778	794	IR740 (M)			Filt LY800					
Krypton	520	580	Green (M)	Cy3 edge (for 2D gel)		Filt 605 (M)	Cy3 (for edge lighting)				
mGFP5	488	526	Blue (M)	Cy2 edge (for 2D gel)	Blue Converter Screen (for UV filter)	Filt 525	Cy2 (for edge lighting)	SW06/032	UV06/032		
mNeon (Green)	506	517	Blue (M)	Blue Converter Screen (with UV filter)	Blue Transilluminator (with UV filter)	Filt 525	SW06/032	UV06/32			
Methoxycoumarin	360	410	Tlum MW	epi UV (MW)		Filt 440					
Oregon Green	501	526	Tlum MW	Blue Converter Screen (with UV filter)	Blue Transilluminator (with UV filter)	SW06/032	UV06/032				
Pacific Blue	410	455	Tlum LW			Filt 440					

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Pacific Green	411	510	Tlum MW			SW06/032					
Pacific Orange	400	551	Tlum MW			SW06/032					
PE-AlexaFluor 647	567	669	Green (M)	Red (M)		Filt 605 (M)	Filt 705 (M)				
PE-Cy5	565	666	Far Red	Red (M)	Cy5 edge (for edge lighting)	Filt LY700	Filt 705 (M)	Cy5 (for edge lighting)			
PE-Cy7	565	774	Green (M)	IR740 (M)		Filt 605 (M)	Filt LY800				
Phycoerythrin (PE)	496, 565	576	Green (M)			Filt 605 (M)					
Red 613 (PE-Texas red)	497, 566	615	Green (M)			Filt 605 (M)					
RFP	553	586	Green (M)			Filt 605 (M)	UV06/032				
SYPRO Orange	300, 470	570	Tlum MW	Blue (M)		UV06/032	SW06/032	Cy3 (for edge lighting)	Filt 565		
SYPRO Red	300, 550	630	Tlum MW	Green (M)		Filt 605 (M)	UV06/032	Filt 625	Cy3 (for edge lighting)		
SYROP Ruby	280, 450	610	Tlum MW	Blue (M)		Filt 605 (M)	UV06/032	Filt 625	Cy3 (for edge lighting)		
SureLight APC	652	657	Red (M)	Cy5 edge (for edge lighting)		Filt705 (M)	Cy5 (for edge lighting)				
SureLight P3	614	662	Far Red	Red (M)	Cy5 edge (for edge lighting)	Filt LY700	Filt 705 (M)	Cy5 (for edge lighting)			
Tetramethylrhodamine (TRIRC)	557	576	Green (M)	Cy3 edge (for 2D gel)		Filt 605 (M)	Cy3 (for edge lighting)				
Texas Red	596	615	Green (M)	Cy3 edge (for 2D gel)		Filt UV032/06	Filt 605 (M)	Cy3 (for edge lighting)			
TruRed	490, 675	695	Red (M)			Filt 705 (M)					
DNA Stains											
Acridine Orange	503	530/640	Tlum MW	Green (M)		SW06/032	Filt 605 (M)	UV06/032			
CyTRAK Orange	457, 488, 549	615	Blue (M)	Blue Converter Screen	Blue Tlum	Filt 525	UV06/032				
DAPI	345	455	Tlum MW	epi UV (MW/LW)		SW06/032					
DRAQ5	646	681, 697	Red (M)	Far Red	Cy5 edge (for edge lighting)	Filt 705 (M)	Filt LY700	Cy5 (for edge lighting)			

DNA Stains	Peak Excitation (nm)	Peak Emission (nm)	Lighting (1st choice)	Lighting (2nd choice)	Lighting (3rd choice)	Filter (1st choice)	Filter (2nd choice)	Filter (3rd choice)	Filter (4th choice)	Filter (5th choice)	Spectrally Similar Dyes
<b>DRAQ7</b>	599, 644	678, 697	Green (M)	Red (M)	Far Red	Filt 605 (M)	Filt 705 (M)	Filt LY700			
<b>Ethidium Bromide</b>	302	595	Tlum MW	epi UV (MW)		UV06/032					
<b>Hoechst 33258</b>	345	478	Tlum MW	epi UV (MW/LW)		SW06/032					
<b>Hoechst 33342</b>	361	497	Tlum MW	epi UV (MW/LW)		SW06/032					
<b>OliGreen</b>	490	520	Blue (M)			Filt 525					
<b>OrioleTM</b>	270	604	Tlum MW			UV06/032					
<b>Propidium iodide (PI)</b>	305, 540	620	Tlum MW			UV06/032					
<b>SYTO 9</b>	483	503	Blue Converter Screen	Blue Tlum		UV06/032					
<b>SYTO 60</b>	652	678	Red (M)			Filt 705 (M)					
<b>SYTOX Blue</b>	445	470	Tlum MW	Blue Converter Screen	Blue Tlum	UV06/032					
<b>SYTOX Green</b>	504	523	Tlum MW	Blue Converter Screen	Blue Tlum	SW06/032	UV06/032				
<b>SYTOX Orange</b>	547	570	Green (M)	Cy3 edge (for edge lighting)		Filt 605 (M)	Cy3 (for edge lighting)				
<b>Thiazole Orange</b>	510	530	Green (M)			Filt 605 (M)	UV06/032				
<b>TO-PRO-3</b>	642	661	Red (M)			Filt 705 (M)					
<b>TOTO-1, TO-PRO-1</b>	515	533	Green (M)			Filt 605 (M)	UV06/032				
<b>YOYO-1</b>	491	509	Blue Converter Screen	Blue Tlum		UV06/032					
Safe DNA Dyes											
<b>GelRed</b>	506	517	Tlum MW	Blue Converter Screen (with UV filter)	Blue Transilluminator (with UV filter)	SW06/032	UV06/032				
<b>GelGreen</b>	360	410	Tlum MW	Blue Converter Screen (with UV filter)	Blue Transilluminator (with UV filter)	SW06/032	UV06/032				
<b>Midori Green</b>	501	526	Tlum MW	Blue Converter Screen (with UV filter)	Blue Transilluminator (with UV filter)	SW06/032	UV06/032				
<b>SYBR Green</b>	410	455	Tlum MW	Blue Converter Screen (with UV filter)	Blue Transilluminator (use with UV filter)	SW06/032	UV06/032				

	Peak Excitation (nm)	Peak Emission (nm)	Lighting (1st choice)	Lighting (2nd choice)	Lighting (3rd choice)	Filter (1st choice)	Filter (2nd choice)	Filter (3rd choice)	Filter (4th choice)	Filter (5th choice)	Spectrally Similar Dyes
<b>Safe DNA Dyes</b>											
<b>SYBR Gold</b>	300-465	537	Tlum MW	Blue Converter Screen (with UV filter)	Blue transilluminator (with UV filter)	SW06/032	UV06/032				
<b>SYBR Safe</b>	300, 509	525	Tlum MW	Blue Converter Screen (with UV filter)	Blue transilluminator (with UV filter)	SW06/032	UV06/032				
<b>SYTO 11</b>	508	527	Tlum MW	Green (M)		UV06/032	Filt 605 (M)				
<b>SYTO 12</b>	499	522	Blue (M)	Blue Converter Screen (with UV filter)	Blue transilluminator (with UV filter)	Filt 525	UV06/032				
<b>SYTO 13</b>	488	509	Tlum MW	Blue (M)	Blue Converter Screen (with UV filter)	UV06/032	Filt 525				
<b>SYTO 16</b>	488	518	Blue (M)	Blue Converter Screen (with UV filter)	Blue Tlum						
<b>SYTO 21</b>	494	517	Tlum MW	Blue (M)	Blue Converter Screen (with UV filter)	SW06/032	Filt 525	UV06/032			
<b>Fluorescent Protein Labels</b>											
<b>Allophycocyanin (APC)</b>	650	660	Green (M)	Red (M)		Filt 605 (M)	Filt 705 (M)				
<b>R-Phycoerythrin</b>	565	576	Tlum LW	Green (M)	HILED UV	UV06/032	Filt 605 (M)				
<b>Qdot Probes</b>											
<b>Pro-Q Diamond</b>	557	580	Tlum MW	Green (M)		UV06/032	Filt 605 (M)				
<b>ProQ-Emerald 300</b>	331	530	Tlum MW			UV06/032					
<b>Qdot 525</b>	UV	525	Tlum MW/LW			Filt 525					
<b>Qdot 565</b>	UV	565	Tlum MW/LW			Filt 565					
<b>Qdot 605</b>	UV	605	Tlum MW/LW			Filt 605		Cy3 (for edge lighting)	UV06/032		
<b>Qdot 655</b>	UV	655	Tlum MW/LW			Filt 655					
<b>Qdot 705</b>	UV	705	Tlum MW/LW			Filt 705					
<b>Qdot 800</b>	UV	800	Tlum MW/LW			Filt 800					

Expressed Fluorescent Protein	Peak Excitation (nm)	Peak Emission (nm)	Lighting (1st choice)	Lighting (2nd choice)	Lighting (3rd choice)	Filter (1st choice)	Filter (2nd choice)	Filter (3rd choice)	Filter (4th choice)	Filter (5th choice)	Spectrally Similar Dyes
Blue Fluorescent Protein	400	455	Tlum MW	epi UV (MW)		SW06/032	UV06/032				
Cyan Fluorescent Protein (CFP)	435	475, 500	Blue (M)	Blue Converter Screen (with UV filter)	Blue Transilluminator (with UV filter)	SW06/032	Filt 525	UV06/032			
EYFP	514	527	Green (M)	Cy3 edge (for edge lighting)		Filt 605 (M)					
Green Fluorescent Protein (GFP)	488	510	epi UV (LW)	Blue (M)		SW032/06	Filt 525				
GFP (S65A mutation)	471	504	Blue (M)			SW06/032	Filt 525				
GFP (S65C mutation)	479	507	Blue (M)			SW06/032	Filt 525				
GFP (S65L mutation)	484	510	Blue (M)			SW06/032	Filt 525				
GFP (S65T mutation)	488	511	Blue (M)			SW06/032	Filt 525				
GFP (Y66F mutation)	360	508	Tlum MW/LW	epi UV MW/LW		SW06/032					
GFP (Y66H mutation)	360	442	Tlum LW	epi UV LW		SW06/032					
GFP (Y66W mutation)	436	485	Blue (M)			SW06/032	Filt 525				
Red Fluorescent Protein (RFP)	555	584	Green (M)			Filt 605 (M)	UV06/032				
Turbo YFP	525	538	Green (M)	Cy3 edge (for edge lighting)	Blue (M)	Filt 605 (M)		SW06/032	Filt 525		
<b>Protein Stain</b>											
Coomassie Blue	Visible		GE/GX Convert 5			UV06/032					
Flamingo	512 (271)	535	ConvertBlue	Tlum MW		UV06/032	Filt SP				

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