

## Lifetime Data of Selected Fluorophores

The following data tables provide you with information on the fluorescent lifetimes, excitation and emission wavelengths of selected fluorescent dyes, probes and labels that are frequently used for biological applications and in biomedical research. If you cannot find the fluorophore that you are interested in, please contact us and we will do our best to obtain the information for you.

Fluorophore	Lifetime [ns]	Solvent	Excitation max [nm]	Emission max [nm]
5-Hydroxytryptamine			370-415	520-540
ATTO 565	3.4	Water	561	585
ATTO 655	3.6	Water	655	690
Acridine Orange	2.0	PB pH 7.8	500	530
Acridine Yellow			470	550
Alexa Fluor 488	4.1	PB pH 7.4	494	519
Alexa Fluor 532			530	555
Alexa Fluor 546	4.0	PB pH 7.4	554	570
Alexa Fluor 633	3.2	Water	621	639
Alexa Fluor 647	1.0	Water	651	672
Alexa Fluor 680	1.2	PB pH 7.5	682	707
BODIPY 500/510			508	515
BODIPY 530/550			534	554

Fluorophore	Lifetime [ns]	Solvent	Excitation max [nm]	Emission max [nm]
BODIPY FL	5.7	Methanol	502	510
BODIPY TR-X	5.4	Methanol	588	616
Cascade Blue			375	410
Coumarin 6	2.5	Ethanol	460	505
CY2			489	506
CY3B	2.8	PBS	558	572
CY3	0.3	PBS	548	562
CY3.5	0.5	PBS	581	596
CY5	1.0	PBS	646	664
CY5.5	1.0	PBS	675	694
Dansyl			340	520
DAPI	0.16	TRIS/EDTA	341	496
DAPI + ssDNA	1.88	TRIS/EDTA	358	456
DAPI + dsDNA	2.20	TRIS/EDTA	356	455
DPH			354	430
Erythrosin			529	554

Fluorophore	Lifetime [ns]	Solvent	Excitation max [nm]	Emission max [nm]
Ethidium Bromide - no DNA	1.6	TRIS/EDTA	510	595
Ethidium Bromide + ssDNA	25.1	TRIS/EDTA	520	610
Ethidium Bromide + dsDNA	28.3	TRIS/EDTA	520	608
FITC	4.1	PB pH 7.8	494	518
Fluorescein	4.0	PB pH 7.5	495	517
FURA-2			340-380	500-530
GFP	3.2	Buffer pH 8	498	516
Hoechst 33258 - no DNA	0.2	TRIS/EDTA	337	508
Hoechst 33258 + ssDNA	1.22	TRIS/EDTA	349	466
Hoechst 33258 + dsDNA	1.94	TRIS/EDTA	349	458
Hoechst 33342 - no DNA	0.35	TRIS/EDTA	336	471
Hoechst 33342 + ssDNA	1.05	TRIS/EDTA	350	436
Hoechst 33342 +	2.21	TRIS/EDTA	350	456

Fluorophore	Lifetime [ns]	Solvent	Excitation max [nm]	Emission max [nm]
dsDNA				
HPTS	5.4	PB pH 7.8	454	511
Indocyanine Green	0.52	Water	780	820
Laurdan			364	497
Lucifer Yellow	5.7	Water	428	535
Nile Red			485	525
Oregon Green 488	4.1	Buffer pH 9	493	520
Oregon Green 500	2.18	Buffer pH 2	503	522
Oregon Green 514			511	530
Prodan	1.41	Water	361	498
Pyrene	> 100	Water	341	376
Rhodamine 101	4.32	Water	496	520
Rhodamine 110	4.0	Water	505	534
Rhodamine 123			505	534
Rhodamine 6G	4.08	Water	525	555
Rhodamine B	1.68	Water	562	583



Fluorophore	Lifetime [ns]	Solvent	Excitation max [nm]	Emission max [nm]
Ru(bpy)3[PF6]2	600	Water	455	605
Ru(bpy)2(dcbpy)[PF6]2	375	Buffer pH 7	458	650
SITS			336	438
SNARF			480	600-650
Stilbene SITS, SITA			365	460
Texas Red	4.2	Water	589	615
TOTO-1	2.2	Water	514	533
YOYO-1 no DNA	2.1	TRIS/EDTA	457	549
YOYO-1 + ssDNA	1.67	TRIS/EDTA	490	510
YOYO-1 + dsDNA	2.3	TRIS/EDTA	490	507
YOYO-3			612	631

PBS = phosphate buffered saline pH 7.4

PB = phosphate buffer

TRIS/EDTA (1mM, pH 7.4) = tris(hydroxymethyl)aminomethane/ethylenediamine-tetraacetic acid.

ss = single-stranded