

Common Fluorophores

Technical Data

DNA Labeling

Fluorescent Dye	Absorption Max. [nm]	Emission Max. [nm]	Molecular Weight [g/mol]	Ext. Coefficient [cm ⁻¹ M ⁻¹]
Alexa Fluor 405	401	421	912.9	35,000
Alexa Fluor 350	346	442	295.4	19,000
DEAC	430	477		
Atto 425	436	484		45,000
Cy 2	489	506		150,000
Oregon Green 488	496	516	394.0	76,000
Alexa Fluor 488	495	519	528.4	71,000
Oregon Green 500	499	519	431.0	84,000
FITC (5-Fluorescein)	495	520	389.4	73,000
FAM (6-Carboxyfluorescein)	495	520	537.5	83,000
FAM (3' 6-Carboxyfluorescein)	495	520	569.5	83,000
FAM (5(6)-Carboxyfluorescein)	495	520	537.5	83,000
SYBR Green I (bound to DNA)	494	521		
Atto 488	501	523		
Oregon Green 514	506	526	494.0	85,000
Rhodamine Green	503	528	394.0	74,000
Rhodamine 123	507	529		
EvaGreen (bound to DNA)	500	530		
DY-505	505	530		
TET (6-Tetrachlorofluorescein)	521	536	675.2	73,000
Atto 520	516	538		110,000
Alexa Fluor 430	433	541	586.8	16,000
CAL Fluor Gold 540	522	541	811.5	74,700
Alexa Fluor 514	517	542		
JOE	520	548	487.0	73,000
Atto 532	532	553		
Alexa Fluor 532	532	553	608.8	81,000
HEX (6-Hexachlorofluorescein)	535	556	744.1	73,000
CAL Fluor Orange 560	537	558	843.8	81,000
DY-485XL	485	560		
Alexa Fluor 555	555	565	850.0	150,000
Cy 3	550	570	508.6	150,000
Alexa Fluor 546	556	573	964.4	104,000

Common Fluorophores

Technical Data

DNA Labeling

TAMRA (5(6)-Carboxytetramethylrhodamine)	546	576	412.5	90,000
TAMRA (6-Carboxytetramethylrhodamine)	544	576	413.0	90,000
Atto 550	554	576		
Rhodamine Red	560	580	654.0	129,000
Spectrum Orange	559	588		
DY-510XL	509	590		
Atto 565	563	592		120,000
Rhodamin ITC, mixed isomers	572	596	548.0	92,000
Cy 3.5	581	596	576.7	150,000
ROX (5(6)-Carboxy-X-Rhodamine)	576	601	516.7	82,000
Texas Red	583	603	702.0	116,000
Alexa Fluor 568	578	603	676.8	91,300
LightCycler Red 610	590	610	825.0	
CAL Fluor Red 610	590	610	919.91	108,000
Alexa Fluor 594	590	617	704.9	73,000
Atto 590	594	624		120,000
Alexa Fluor 610	612	628		
DY-480XL	500	630		
Atto 610	615	634		150,000
LightCycler Red 640	625	640	758.0	
Alexa Fluor 633	632	647	1085.0	100,000
Alexa Fluor 647	650	665	850.0	239,000
Cy 5	643	667	534.6	250,000
Carboxynaphthofluorescein	598	668	458.5	42,000
Atto 647N	644	669		
LightCycler Red 670	645	670	820.0	
WellRED D4-PA	650	670	544.8	203,000
Atto 655	663	684		120,000
Alexa Fluor 660	663	690	985.0	132,000
Cy 5.5	675	694	634.8	250,000
Atto 680	680	700		125,000
Alexa Fluor 680	679	702	1035.0	184,000
LightCycler Red 705	685	705	753.0	
IRD 700	685	705	891.2	170,000
WellRED D3-PA	685	706	645.0	224,000

Common Fluorophores

Technical Data

DNA Labeling

Alexa Fluor 700	702	723	1285.0	192,000
Cy 7	743	767		250,000
WellRED D2-PA	750	770	611.0	170,000
Alexa Fluor 750	749	775	1185.0	240,000
IRD 800	795	819	990.3	270,000

Visible spectrum of light

