

Fluorescent Labels

Technical Information

Modified Oligonucleotides

Absorption and emission wavelengths of fluorescently modified oligonucleotides

Fluorescent Dye	Modification	Molecular Weight [g/mol]	Extinction Coefficient	Absorption [nm]	Emission [nm]	Fluorescent Color
FITC (5-Fluorescein)	5', 3', Internal	389.4	73,000	495	520	green
FAM (6-Carboxyfluorescein)	5', 3'	537.5	83,000	495	520	green
Rhodamine Green	5'	394.0	74,000	503	528	green
TET (6-Tetrachlorofluorescein)	5'	675.2	73,000	521	536	green
CAL Fluor Gold 540	5'	811.5	74,700	522	541	yellow-green
JOE	5'	487.0	73,000	520	548	yellow-green
HEX (6-Hexachlorofluorescein)	5', 3'	744.1	73,000	535	556	yellow-green
CAL Fluor Orange 560	5'	843.8	81,000	537	558	yellow-green
Cy3	5', 3'	508.6	150,000	552	570	yellow
TAMRA	5', 3', Internal	413.0	90,000	544	576	yellow
Rhodamin ITC, mixed isomers	5'	548.0	92,000	572	596	orange
ROX (5(6)-Carboxy-X-Rhodamine)	5'	516.7	82,000	576	601	orange
Texas Red	5'	702.0	116,000	583	603	orange
CAL Fluor Red 610	5'	919.9	108,000	590	610	orange
Cy5	5', 3', Internal	534.6	250,000	643	667	red
Cy5.5	5'	634.8	250,000	675	694	far-red
IRD 700	5'	891.2	170,000	685	705	far-red
IRD 800	5'	990.3	270,000	795	819	IR

Visible spectrum of light

