

R6G phosphoramidite, 6-isomer

<http://hk.lumiprobe.com/p/6-r6g-phosphoramidite>

R6G phosphoramidite for oligonucleotide synthesis, pure 6-isomer.

R6G (rhodamine 6G) is a xanthene dye of the rhodamine family with high fluorescence quantum yield and high molar extinction coefficient. Relative to those of fluorescein, the absorption (518 nm) and emission (542 nm) maxima of 6-R6G are shifted into the long-wave region.

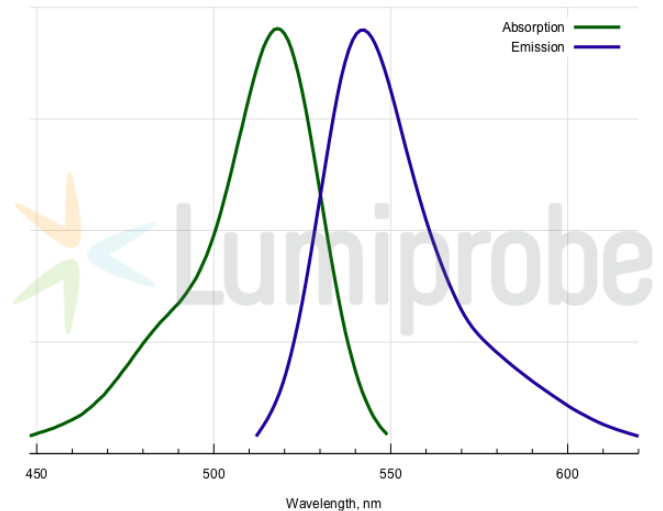
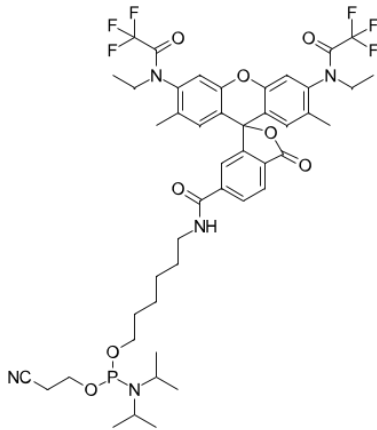
R6G can be used as a FRET acceptor in DNA-sequencing and in short tandem repeat (STR) analysis. The dye is commonly used for producing TaqMan probes for quantitative PCR. In comparison with HEX and JOE dyes, R6G in combination with BHQ1 quencher has stronger quenching in molecular beacon probes, significantly reducing background fluorescence in PCR.

Usage:

Coupling: 10 minutes.

Deprotection: solution of tert-Butylamine in water (1:3 v/v) overnight at 55°C.

Aqueous ammonia and AMA (solution of 30% ammonium hydroxide/40% aqueous methylamine 1:1 v/v) must NOT be used for deprotection of the modified oligonucleotide from the solid-phase support because of complete and irreversible R6G degradation.



外观:

分子量: 949.93

CAS 编号: 1355330-47-0

分子式: $C_{46}H_{54}F_6N_5O_8P$

溶解度:

质量控制:

储存条件:

激发/吸收极大值, 纳米: 518

ϵ , 摩尔吸光系数, cm^{-1} : 116000

发射极大值, 纳米: 542

荧光量子产率: 0.95

CF₂₆₀: 0.18

CF₂₈₀: 0.17

稀释剂: