

FAM-11-dUTP, 6-isomer

<http://hk.lumiprobe.com/p/fam-11-dutp-6>

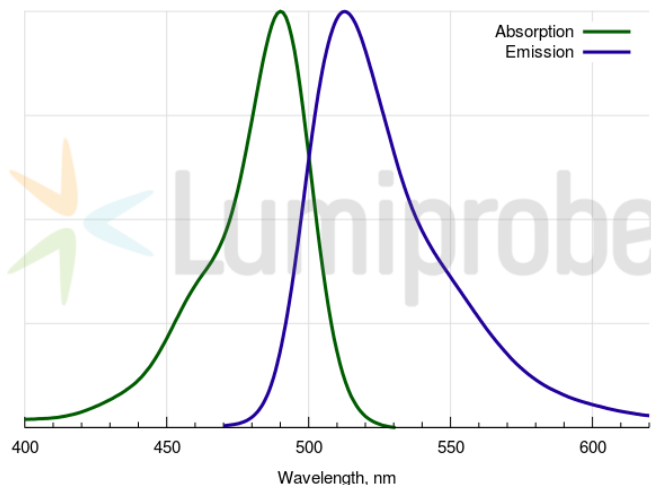
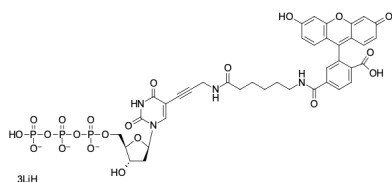
6-FAM-11-2'-deoxyuridine-5'-triphosphate, trilithium salt, is a common agent for non-radioactive DNA labeling.

FAM (fluorescein) is a popular green-fluorescent dye with an emission maximum at 513 nm. This derivative is a pure FAM 6-isomer.

6-FAM-11-dUTP is a modified triphosphate that can be incorporated into DNA instead of dTTP by various enzymes, including Klenow fragment, Taq-Polymerase, DNA-Polymerase I, Phi 29 Polymerase, reverse transcriptase or terminal transferase.

In contrast to triphosphates with a dye directly linked to aminoallyl-dUTP, this triphosphate contains a linker of 11 atoms between the fluorophore and the nitrogenous base. This linker length prevents FAM-label from potential static quenching and increases the efficiency of nucleotide incorporation during DNA synthesis.

6-FAM-11-dUTP can be used to produce a labeled product during PCR and cDNA synthesis and for labeled DNA-probes synthesis by random primed labeling and Nick-translation. Synthesized fluorescence-labeled DNA probes can be used to detect specific sequences by Southern blot, Northern blot, *in situ* hybridization, or by microarray analysis.



外观:

分子 1013.49

量:

分子 $C_{39}H_{39}N_4Li_3O_{21}P_3$

式:

IUPAC ((2R,3S,5R)-5-(5-(3-(6-(3-carboxy-4-(6-hydroxy-3-oxo-3H-xanthen-9-yl)benzamido)hexanamido)prop-1-yn-1-yl)-2,4-dioxo-3,4-dihydropyrimidin-1(2H)-yl)-3-hydroxytetrahydrofuran-2-yl)methyl
名称: hydrogen triphosphate

溶解

度:

质量

控制:

储存

条件:

激发/ 492

吸收

极大

值,

纳米:

ϵ , 摩 74000

尔吸

光系

数 cm^2

发射 517

极大

值,

纳米:

荧光 0.93

量子

产率:

CF₂₆₀ 0.22

CF₂₈₀ 0.17