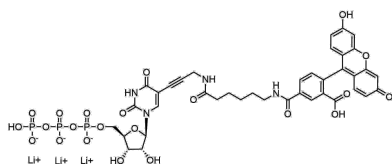


FAM-11-UTP, 6-isomer

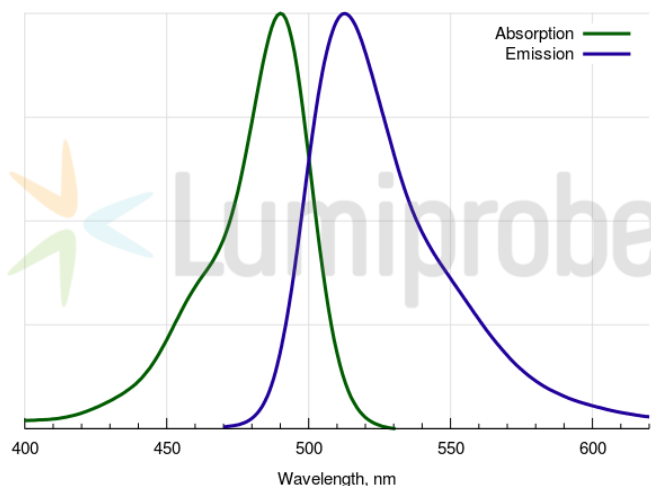
<http://www.lumiprobe.com/p/fam-11-utp-6-isomer>

6-fluorescein (FAM) derivative of uridine triphosphate (UTP). FAM is a fluorophore with a high quantum yield. The maximum emission of the fluorescence is at a wavelength of 513 nm in the green spectrum range.

6-FAM-11-UTP can be used as a substrate for RNA-polymerases T7, T3 and SP6 during *in vitro* transcription. RNA-probes produced with this method can be used for fluorescence hybridization *in situ*, including multiplex, and for Northern blot. Fluorescently-labeled cRNA can be used for microarray-based gene expression profiling.



Structure of FAM-11-UTP, 6-isomer



Absorption and emission spectra of FAM

General properties

Appearance: yellow/orange solid
Molecular weight: 1026.54
Molecular formula: $C_{39}H_{36}Li_3N_4O_{22}P_3$
IUPAC name: ((2R,3S,4R,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)-3,4-dihydroxytetrahydrofuran-2-yl)methyl hydrogen triphosphate
Solubility: soluble in water
Quality control: HPLC-MS (95%), testing in enzymatic reaction
Storage conditions: Storage: 12 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light and excessive freeze-thaw cycles.

Spectral properties

Excitation/absorption maximum, nm: 492
 ϵ , L·mol⁻¹·cm⁻¹: 74000
Emission maximum, nm: 517
Fluorescence quantum yield: 0.93
CF₂₈₀: 0.22
CF₂₈₀: 0.17