

FAM-11-dCTP, 6-isomer

http://www.lumiprobe.com/p/fam-11-dctp-6

6-fluorescein (FAM) derivative of deoxycytidine triphosphate (dCTP).

FAM 6-isomer is a common fluorophore used for labeling biomolecules; FAM has a high quantum yield and bright green emission.

FAM-11-dCTP can be used for enzymatic DNA labeling via Nick-translation.

The linker length (11 carbon atoms) is optimal for the efficient incorporation of fluorescently-labeled dCTP into the growing DNA chain.

Labeled DNA can be used for FISH experiments, microarray gene profiling, Southern blot, and Northern blot.





General propertie

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Appearance:	yellow to orange solid			
Molecular weight:	1012.5			
Molecular formula:	$C_{39}H_{40}N_3Li_3O_{30}P_3$			
IUPAC name:	((2R,3S,5R)-5-(4-amino-5-(3-(6-(3-carboxy-4-(6-hydroxy-3-oxo-3H-xanthen-9-yl)benzamido)hexanamido)prop-1-yn-1-yl)-2-oxo-3,4-dihydropyrimidin-1(2H)-yl)-3-hydroxytetrahydrofuran-2-yl)methyl hydrogen triphosphate			
Solubility:	good in water			
Quality control:	HPLC-MS (95%), testing in enzymatic reaction			
Storage conditions:	Storage: 12 months after receival 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.			
Legal statement:	This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.			
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Spectral properties

Excitation/absorption maximum, nm:	490
ε, L·mol ^{−1} ·cm ^{−1} :	80000
Emission maximum, nm:	513
Fluorescence quantum yield:	0.93
CF ₂₆₀ :	0.20
CF ₂₈₀ :	0.17