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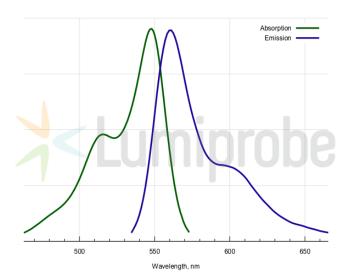
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sulfo-Cyanine3 dUTP

http://www.lumiprobe.com/p/sulfo-cy3-dutp

Labeled deoxynucleoside triphosphates (dNTPs) provide an efficient way for the enzymatic labeling of DNA. DNA microarrays, PCR amplicons, and reverse transcripts can be labeled using various dNTPs.

sulfo-Cyanine3 is a dye emitting in yellow range. This fluorophore is a standard dye used in DNA microarray experiments. sulfo-Cyanine3 dUTP is a labeled triphosphate providing efficient labeling in enzymatic reactions with various enzymes, including simple Taq polymerase. Quality of each batch is assured by HPLC-MS, and testing in enzymatic reaction.



HO P-O P-O P-O ON N

Structure of Sulfo-Cyanine3 dUTP

Absorption and emission spectra of sulfo-Cyanine3

General properties

Appearance: red solid / solution

Molecular weight: 1247.84

 $\label{eq:continuous} \begin{array}{ll} \text{Molecular formula:} & C_{47}H_{62}N_6Li_4O_{22}P_3S_2 \\ \\ \text{Solubility:} & \text{good in water} \end{array}$

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.

Spectral properties

Excitation/absorption maximum, nm: 548 ϵ , L·mol $^{-1}$ ·cm $^{-1}$: 162000 Emission maximum, nm: 563 Fluorescence quantum yield: 0.1 CF_{260} : 0.03 CF_{280} : 0.06