

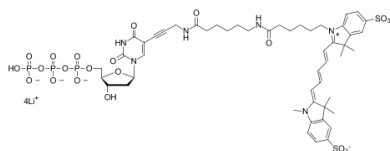
## sulfo-Cyanine5 dUTP

<http://www.lumiprobe.com/p/sulfo-cy5-dutp>

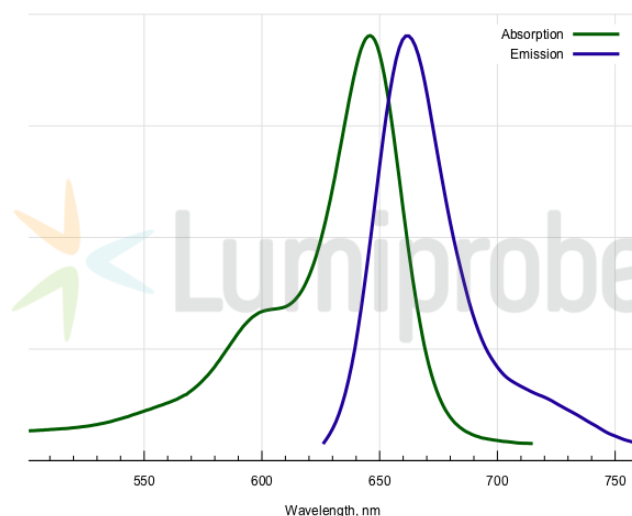
sulfo-Cyanine5 dUTP (deoxyuridine triphosphate) is a modified nucleoside triphosphate for the enzymatic labeling of DNA. The triphosphate is an analog of Cy5-dUTP. However, unlike aminoallyl dUTP directly modified with dye, this triphosphate contains a longer linker arm that increases the efficiency of its incorporation by usual polymerases, like Taq polymerase.

sulfo-Cyanine5 is a bright, far-red emitting dye for the Cy5 channel.

The triphosphate is supplied in the lyophilized ready-to-use form of lithium salt.



**Structure of sulfo-Cyanine5 dUTP**



**Absorption and emission spectra of sulfo-Cyanine5**

### General properties

Appearance:	blue solid / solution
Molecular weight:	1275.89
Molecular formula:	$C_{49}H_{66}N_6Li_4O_{22}P_3S_2$
Solubility:	good 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:	646
$\epsilon$ , $L \cdot mol^{-1} \cdot cm^{-1}$ :	271000
Emission maximum, nm:	662
Fluorescence quantum yield:	0.28
$CF_{260}$ :	0.04
$CF_{280}$ :	0.04