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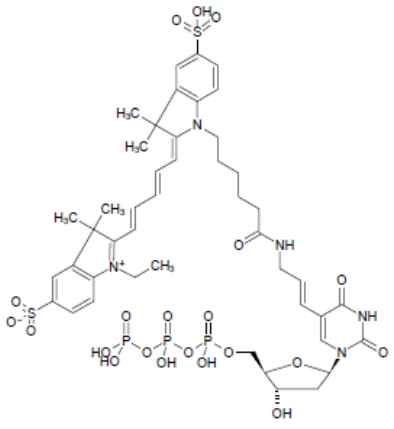
Product Information

19475 Aminoallyl-dUTP-Cy®5 triethylammonium salt solution

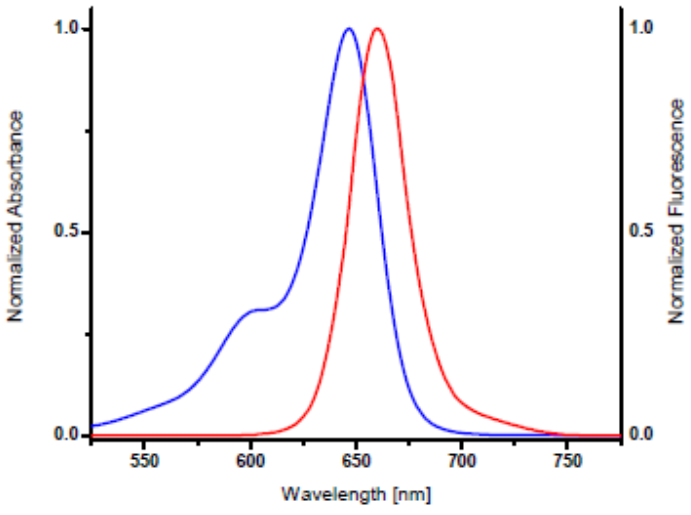
Description:
Aminoallyl-dUTP-Cy5 is recommended for direct enzymatic labeling of DNA/cDNA e.g. by PCR and Nick Translation. It is incorporated as substitute for its natural counterpart dTTP. The resulting Dye-labeled DNA/cDNA probes are ideally suited for fluorescence hybridization applications such as FISH or microarray-based gene expression profiling. Optimal substrate properties and thus labeling efficiency is ensured by an optimized linker attached to the C5 position of uridine.

Recommended Aminoallyl-dUTP-Cy5/dTTP ratio for PCR and Nick Translation:
50% Aminoallyl-dUTP-Cy5/ 50% dTTP

Molecular Formula:	$C_{45}H_{58}N_5O_{21}P_3S_2$ (free acid)
Molecular Weight:	1162.01 g/mol (free acid)
Form:	sterile clear aqueous solution In 10 mM Tris-HCl 7.5 +/-0.5
Concentration:	1 mM
pH:	7.5 +/-0.5
Spectroscopic Properties:	λ_{exc} 649 nm; λ_{em} 670 nm; ε 250.0 L mmol^{-1} cm^{-1} (Tris-HCl pH 7.5)
Package quantity:	10 µL



Structural formula of Aminoally-dUTP – Cy5



Excitation and Emission spectrum of Cy5

Applications:
Incorporation into DNA/cDNA by
- PCR with Taq polymerase [unpublished results]
- Nick Translation with DNAse I/ DNA Polymerase I [unpublished results]

Please note
Protect the Dye-labeled dUTP from exposure to light and carry out experimental procedures in low light conditions. The optimal final concentration of the Dye-labeled dUTP may very depending on the application and assay conditions. For optimal product yields and high incorporation rates an individual optimization of the Dye-labeled-dUTP/dTTP ratio is recommended.

Storage Conditions: store at -20 °C, protect from light

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Precautions and Disclaimer:
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.