

Product Information

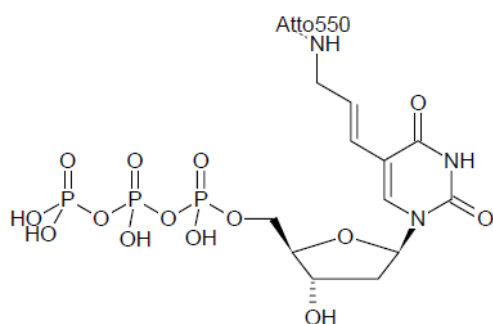
30387 Aminoallyl-dUTP-Atto 550 triethylammonium salt solution

Description:

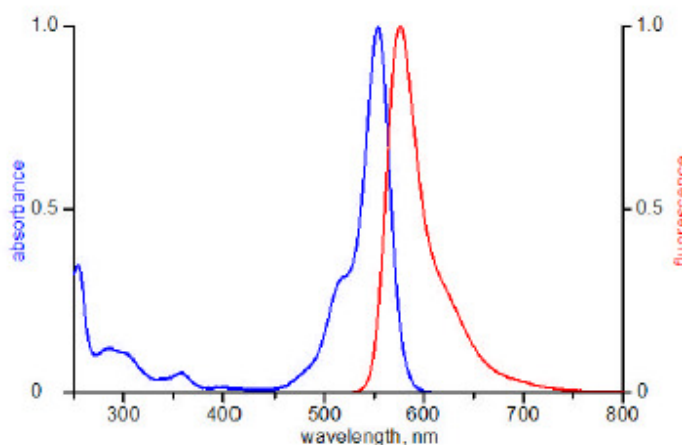
Aminoallyl-dUTP-Atto 550 is recommended for direct enzymatic labeling of DNA/cDNA by Nick Translation. It is incorporated as substitute for its natural counterpart dTTP. The resulting Dye-labeled DNA/cDNA probes are ideally suited for fluorescence hybridization applications such as FISH or microarray-based 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-Atto 550/dTTP ratio for Nick Translation:
50% Aminoallyl-dUTP-Atto 550/ 50% dTTP

Molecular Formula:	C ₁₂ H ₂₀ N ₃ O ₁₄ P ₃ - Atto 550 (free acid)
Molecular Weight:	1099.22 g/mol (free acid)
Form:	sterile clear aqueous solution in 10 mM Tris-HCl pH 7.5 +/-0.5
Concentration:	1 mM
pH:	7.5 +/-0.5
Spectroscopic Properties:	λ _{exc} 554 nm; λ _{em} 576 nm; ε 120.0 L mmol ⁻¹ cm ⁻¹ (Tris-HCl pH 7.5)
Package quantity:	10 μL



Structural formula of Aminoallyl-dUTP - Atto-550



excitation and emission spectrum of Atto 550

Applications:

Incorporation into DNA/cDNA by

- Nick Translation with DNase I/ DNA Polymerase I unpublished results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 vary 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

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.

©2016 Sigma-Aldrich Co. LLC. All rights reserved. SIGMA-ALDRICH is a trademark of Sigma-Aldrich Co. LLC, registered in the US and other countries. Sigma brand products are sold through Sigma-Aldrich, Inc. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see product information on the Sigma-Aldrich website at www.sigmaaldrich.com and/or on the reverse side of the invoice or packing slip.