

Product Information

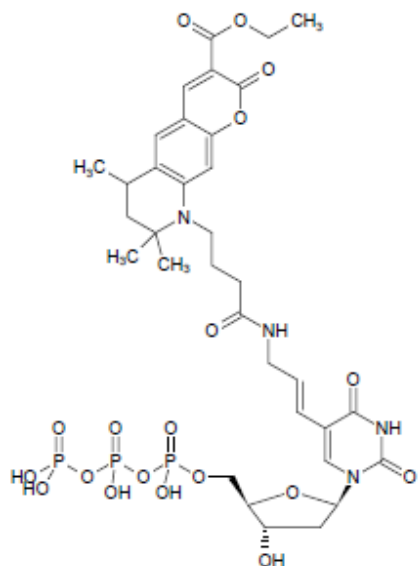
19680 Aminoallyl-dUTP-Atto 425 triethylammonium salt solution

Description:

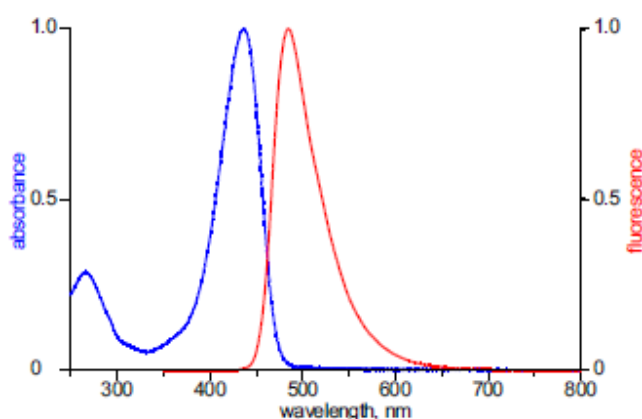
Aminoallyl-dUTP-Atto 425 is recommended for direct enzymatic labeling of DNA/cDNA e.g. by PCR and Nick Translation. It is incorporated as substitute for its natural counterpart dTTP. The resulting Dye-labeled DNA/cDNA probes are ideally suited for fluorescence hybridization applications such as FISH 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-Atto 425/dTTP ratio for PCR and Nick Translation: 25% Aminoallyl-dUTP-Atto 425/ 75% dTTP (PCR), 50% Aminoallyl-dUTP-Atto 425/ 50% dTTP (Nick Translation)

Molecular Formula:	C ₃₄ H ₄₅ N ₄ O ₁₉ P ₃ (free acid)
Molecular Weight:	906.66 g/mol (free acid)
Form:	clear aqueous solution
Concentration:	1 mM
pH:	7.5 +/-0.5
Spectroscopic Properties:	λ _{exc} 436 nm; λ _{em} 484 nm; ε 45.0 L mmol ⁻¹ cm ⁻¹ (Tris-HCl pH 7.5)
Package quantity:	10 μL



Structural formula of Aminoallyl-dUTP - Atto-425



excitation and emission spectrum of Atto 425

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- PCR with *Taq* polymerase unpublished results
- Nick Translation with DNase I/ DNA Polymerase I unpublished results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 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

Selected References:

Basinko *et al.* (2012) Clinical and molecular cytogenetic studies in ring chromosome 5: report of a child with congenital abnormalities. *Eur. J. Med. Genet.* **55(2)**:112.

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.

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