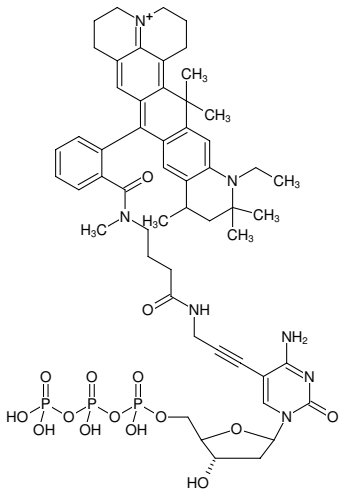
DATA SHEET

Jena Bioscience

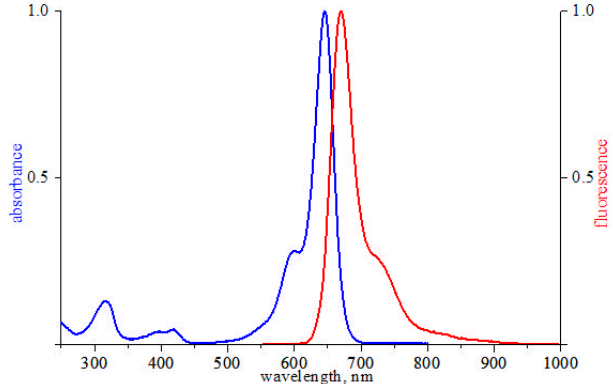
5-Propargylamino-dCTP-ATTO-647N

5-Propargylamino-2'-deoxycytidine-5'-triphosphate, labeled with ATTO 647N, Triethylammonium salt

Cat. No.	Amount
NU-809-647N-S	10 µl (1 mM)
NU-809-647N-L	5 x 10 µl (1 mM)



Structural formula of 5-Propargylamino-dCTP-ATTO-647N



excitation and emission spectrum of ATTO 647N

For general laboratory use.

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C

Short term exposure (up to 1 week cumulative) to ambient temperature possible.

Shelf Life: 12 months after date of delivery

Molecular Formula: $C_{54}H_{68}N_7O_{15}P_3$ (free acid)

Molecular Weight: 1148.08 g/mol (free acid)

Exact Mass: 1147.40 g/mol (free acid)

Purity: ≥ 95 % (HPLC)

Form: solution in water

Color: blue

Concentration: 1.0 mM - 1.1 mM

pH: 7.5 ±0.5

Spectroscopic Properties: λ_{exc} 646 nm, λ_{em} 664 nm, ε 150.0 L mmol^{-1} cm^{-1} (Tris-HCl pH 7.5)

Description:
5-Propargylamino-dCTP-ATTO-647N is recommended for direct enzymatic labeling of DNA/cDNA by Nick Translation. It is incorporated as substitute for its natural counterpart dCTP. 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 cytidine.

Recommended Propargylamino-dCTP-ATTO-647N/dCTP ratio for Nick Translation: 30-50% Propargylamino-dCTP-ATTO-647N/ 70-50% dCTP

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