

Product Datasheet

5-Propargylamino-dCTP-Cy5 (orb1733849)

Catalog Number	orb1733849
Category	Small Molecules
Description	5-Propargylamino-dCTP-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 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-Cy5/dCTP ratio for PCR and Nick Translation: 30-50% Propargylamino-dCTP-Cy5/70-50% dCTP.
Form/Appearance	solution in 10 mM Tris-HCl; Color: blue; pH: 7.5 ± 0.5
Concentration	1.0 mM-1.1 mM
Purity	≥ 95% (HPLC)
MW	Theoretical MW: 1159.01 g/mol (free acid); Detected MW: 1158.23 g/mol (free acid)
Application notes	Incorporation into DNA/cDNA by: PCR with Taq polymerase in-house data; Nick Translation with DNase I/DNA Polymerase in-house data. Spectroscopic Properties: λ _{exc} 649 nm, λ _{em} 670 nm, ε 250.0 L mmol ⁻¹ cm ⁻¹ (Tris-HCl pH 7.5).
Formula	C ₄₅ H ₅₇ N ₆ O ₂₀ P ₃ S ₂
SMILES	<chem>N(CC#Cc1cn(c(=O)nc1N)[C@@H]1O[C@H](COP(=O)(O)OP(=O)(O)OP(=O)(O)O)[C@H](C1)O)C(=O)CCCCN1c2ccc(S(=O)(=O)O)cc2C(C)(C)/C1=C\C=C\C=C\C1=*(c2ccc(cc2C1(C)C)S(=O)(=O)[O-])CC</chem>
Storage	store at -20 °C. Short term exposure (up to 1 week cumulative) to ambient temperature possible

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Note For research use only

Expiration Date 12 months from date of receipt.

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