

Product Datasheet

Biotin-11-dCTP (orb64039)

Catalog Number	orb64039
Category	Small Molecules
Description	Biotin-11-dCTP is enzymatically incorporated into DNA/cDNA as sub-stitute for its natural counterpart dCTP. The resulting Biotin-labeled DNA/cDNA probes are subsequently detected using streptavidin conjugated with horseradish peroxidase (HRP), alkaline phosphatase (AP), a fluorescent dye or agarose/magnetic beads. Optimal sub-strate properties and thus labeling efficiency as well as an efficient detection of the Biotin moiety is ensured by a 11-atom linker attached to the C5 position of cytidine. Recommended Biotin-11-dCTP/dCTP ratio for PCR and Nick Translation: 50% Biotin-11-dCTP/50% dCTP.
Form/Appearance	filtered solution (30 kDa) in 10 mM Tris-HCl; Color: colorless to slightly yellow; pH: 7.5 ± 0.5
Concentration	1.0 mM-1.1 mM
Purity	≥ 95% (HPLC)
MW	Theoretical MW: 859.67 g/mol (free acid); Detected MW: 859.18 g/mol (free acid)
Application notes	FISH; SNP-analysis; Nick-translation; TUNEL. Spectroscopic Propertie: λ _{max} 294 nm, ε 9.3 L mmol ⁻¹ cm ⁻¹ (Tris-HCl, pH 7.5).
CAS Number	136632-30-9
Formula	C ₂₈ H ₄₄ N ₇ O ₁₆ P ₃ S
SMILES	<chem>N(CC#Cc1c(nc(=O)n([C@H]2C[C@@H]([C@H](O2)COP(=O)(OP(=O)(OP(=O)(O)O)O)O)c1)N)C(=O)CCCCCNC(=O)CCCC[C@H]1[C@H]2NC(=O)N[C@H]2CS1</chem>
Storage	store at -20 °C

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Note	For research use only
Expiration Date	12 months from date of receipt.

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