

Product Datasheet

Biotin-11-dATP (orb1734115)

Catalog Number	orb1734115
Category	Small Molecules
Description	Biotin-11-dATP is enzymatically incorporated into DNA/cDNA as sub-stitute for its natural counterpart dATP. 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 7-Deaza position of adenine.
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: 882.71 g/mol (free acid); Detected MW: 882.19 g/mol (free acid)
Application notes	Incorporation into DNA/cDNA by: PCR with Taqpolymerase & in-house data; Nick Translation with DNase I/DNA Polymerase I; Primer Extension with Klenow exo-; Reverse Transcription with MMLV Reverse Transcriptase. Spectroscopic Propertie: λmax 280 nm, ε 12.7 L mmol-1 cm-1 (Tris-HCl, pH 7.5).
Formula	C ₃₀ H ₄₅ N ₈ O ₁₅ P ₃ S
SMILES	<chem>N1C(=O)N[C@@H]2[C@H]1[C@H](CCCCC(=O)NCCCCC(=O)NCC#Cc1cn(c3ncnc(N)c13)[C@@H]1O[C@H](COP(=O)(O)OP(=O)(O)OP(=O)(O)O)[C@@H](O)C1)SC2</chem>
Storage	store at -20 °C. Short term exposure (up to 1 week cumulative) to ambient temperature possible
Note	For research use only

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