

## Product Datasheet

### DIG-11-dUTP (orb1733878)

<b>Catalog Number</b>	orb1733878
<b>Category</b>	Small Molecules
<b>Description</b>	Digoxigenin-11-dUTP is enzymatically incorporated into DNA/cDNA as substitute for its natural counterpart dTTP. The resulting Digoxigenin-labeled DNA/cDNA probes are subsequently detected using Digoxigenin-antibodies conjugated with horseradish peroxi-dase (HRP), alkaline phosphatase (AP) or a fluorescent dye. Optimal substrate properties and thus labeling efficiency is ensured by a 11-atom linker attached to the C5 position of uridine. Recommended Digoxigenin-11-dUTP/dTTP ratio for PCR and Nick Translation: 35% Digoxigenin-11-dUTP/65% dTTP.
<b>Form/Appearance</b>	filtered solution (30 kDa) in 10 mM Tris-HCl; Color: colorless to slightly yellow; pH: 7.5 ± 0.5
<b>Concentration</b>	1.0 mM-1.1 mM
<b>Purity</b>	≥ 95% (HPLC)
<b>MW</b>	Theoretical MW: 1066.91 g/mol (free acid); Detected MW: 1066.34 g/mol (free acid)
<b>Application notes</b>	Incorporation into DNA/cDNA by: PCR with Taqpolymerase & in-house data; Nick Translation with DNase I/DNA Polymerase I and in-house data; Primer Extension with Klenow exo-; 3'-End Labeling with Terminal deoxynucleotidyl Transferase (TdT); Reverse Transcription with MMLV Reverse Transcriptase. Incorporation into RNA by 3'-End Labeling with Terminal deoxynucleotidyl Transferase (TdT). <b>Spectroscopic Propertie:</b> λ <sub>max</sub> 290 nm, ε 8.8 L mmol <sup>-1</sup> cm <sup>-1</sup> (Tris-HCl, pH 7.5).
<b>Formula</b>	C <sub>43</sub> H <sub>65</sub> N <sub>4</sub> O <sub>21</sub> P <sub>3</sub>

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**SMILES**

C1[C@@H]2[C@](CC[C@@H]1OCC(=O)NCCCCC(=O)NC/C=C/c1c(=O)[nH]c(=O)n([C@@H]3O[C@H](COP(=O)(OP(=O)(OP(=O)(O)O)O)[C@@H](O)C3)c1)([C@@H]1[C@@H](CC2)[C@@]2([C@]([C@@H](C1)O)([C@H](CC2)C1=CC(=O)OC1)C)O)C

**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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