

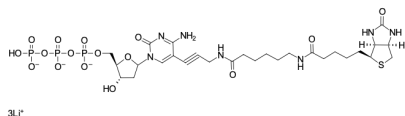
## Biotin-11-dCTP

<http://www.lumiprobe.com/p/biotin-11-dctp>

Biotin-11-dCTP is a deoxycytidine triphosphate (dCTP) linked to a biotine molecule via an 11-atom linker, which allows efficient interaction with avidin and streptavidin; incorporation into DNA proceeds as with natural dCTP.

Biotin-11-dCTP is a substrate for Klenow fragment, T4 and Taq DNA-polymerases, reverse transcriptase, and terminal transferase. Biotinylated DNA can be detected using alkaline phosphatase-conjugated avidin/streptavidin or relevant fluorescent-labeled antibodies.

Biotin-labeled DNA/cDNA probes can be used for fluorescent hybridization *in situ* or microarray gene profiling.



**Structure of Biotin-11-dCTP**

### General properties

Appearance: colorless solid

Molecular weight: 877.48

Molecular formula: C<sub>28</sub>H<sub>41</sub>Li<sub>3</sub>N<sub>9</sub>O<sub>18</sub>P<sub>3</sub>S

IUPAC name: ((2R,3S,5R)-5-(4-amino-2-oxo-5-(3-(6-(5-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)pentanamido)hexanamido)prop-1-yn-1-yl))-3,4-dihydropyrimidin-1(2H)-yl)-3-hydroxytetrahydrofuran-2-yl)methyl hydrogen triphosphate

Solubility: soluble in water

Quality control: HPLC-MS (95%), testing in enzymatic reaction

Storage conditions: Storage: 12 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid excessive freeze-thaw cycles.