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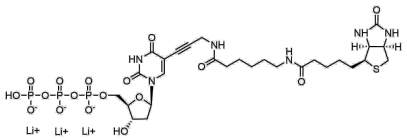
Biotin-11-dUTP

http://www.lumiprobe.com/p/biotin-11-dutp

Biotinylated deoxyuridine triphosphate (dUTP) can be used for DNA labeling using various methods, including Nick-translation, polymerase chain reaction (PCR), random priming, and 3'-terminal non-radioactive labeling. Generated probes can be used in various hybridization experiments such as Southern blot, Northern blot, dot blot, or FISH. Biotin-labeled probes are detected with horseradish peroxidase-conjugated streptavidin or other biomolecule conjugates binding biotin.

«11» in the compound name indicates the length of the linker between dUTP and biotin; this linker increases the efficiency of labeled dUTP incorporation into DNA and interaction of biotin with specific proteins such as avidin/streptavidin or anti-biotin antibodies.



Structure of Biotin-11-dUTP

General properties

Appearance:	colorless solid
Molecular weight:	881.48
Molecular formula:	$C_{28}H_{43}N_6Li_3O_{17}P_3S$
IUPAC name:	((2R,3S,5R)-5-(2,4-dioxo-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 receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid excessive freeze-thaw cycles.