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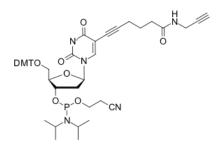
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# Alkyne dT phosphoramidite

http://www.lumiprobe.com/p/alkyne-dt-amidite-2

This reagent is designed for the synthesis of oligonucleotides bearing triple bond (alkyne) in the middle of the chain. Alkyne is attached to deoxyuridine fragment, and it does not interfere with the hybridization to the complementary strand. This allows to prepare modified oligonucleotide probes bearing fluorescent dyes, quenchers, and other fragments attached to the middle of the chain, by virtue of copper catalyzed Click chemistry reaction with various azides.

This phosphoramidite is solid, so it is easy to dispense and handle. It is compatible with the standard deblocking conditions.



### Structure of alkyne dT phosphoramidite

## **General properties**

Appearance: off white solid

Mass spec M+ increment: 437.1 Molecular weight: 877.96 Molecular formula:  $C_{40}H_{56}N_5O_9P$ 

Solubility: good in acetonitrile, DCM

Quality control: NMR <sup>1</sup>H, NMR <sup>31</sup>P, HPLC-MS

Storage conditions: Storage: 12 months after receival at -20°C in the dark. Transportation: at room temperature for

up to 3 weeks. Desiccate.

### Oligo synthesis details

Diluent: acetonitrile

Coupling conditions: standard coupling, identical to normal nucleobases

Cleavage conditions: ammonia, 2 h at room temperature
Deprotection conditions: identical to protected nucleobases