

Alkyne-PEG4-phosphoramidite

<http://hk.lumiprobe.com/p/alkyne-peg4-amidite>

Alkyne-PEG4-phosphoramidite is a tetraethylene glycol phosphoramidite with a terminal triple bond that can be used for the synthesis of various functionalized oligonucleotides. An alkyne fragment in the resulting molecules reacts in Click Chemistry reactions with azide-containing compounds in the presence of copper (I) salts to produce various oligonucleotide conjugates, such as those with dyes, peptides, or glycans. The yield of resulting compounds is rather high, their isolation and purification are often easier than those of molecules produced by the interaction of amino-modified oligonucleotides with activated esters such as those of dyes. Click Chemistry reactions are bioorthogonal because neither terminal alkyne nor azide functional groups usually are found in biomolecules.

A tetraethylene glycol linker in phosphoramidite gives it higher hydrophilic properties and reduces toxicity and immunogenicity of produced conjugates.

Recommendations for using the reagent:

Solvent: Acetonitrile.

Recommended condensation time: Standard, as for natural nucleoside phosphoramidites.

It is recommended to use standard deprotection conditions.

外观:

分子量: 432.49

CAS 编号: 1682657-14-2

分子式: $C_{20}H_{37}N_2O_6P$

IUPAC 名称: 2-cyanoethyl (3,6,9,12-tetraoxapentadec-14-yn-1-yl) diisopropylphosphoramidite

溶解度:

质量控制:

储存条件:

稀释剂:

偶联条件:

解保护条件: