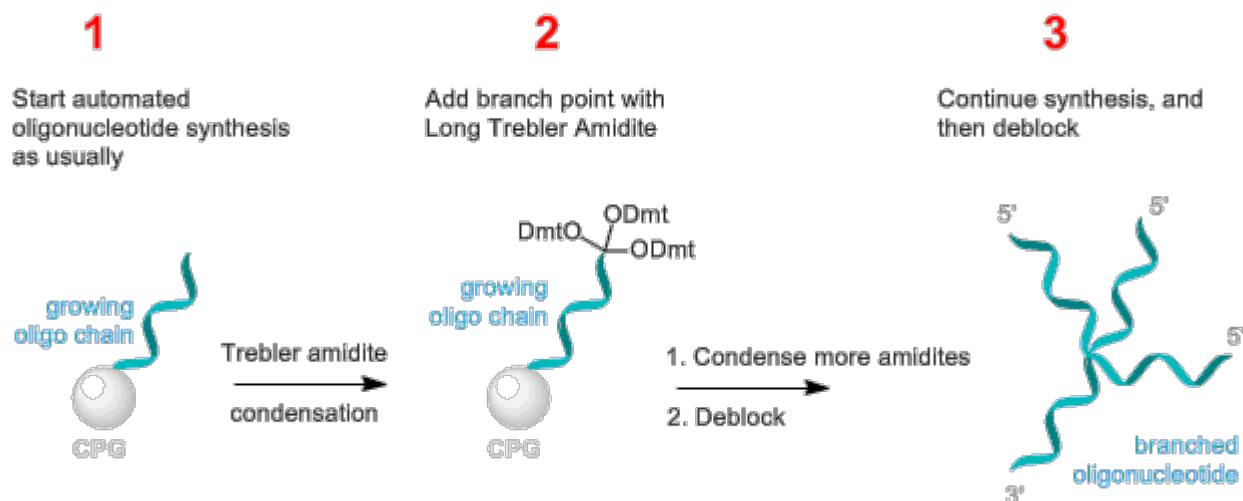


Long trebler phosphoramidite

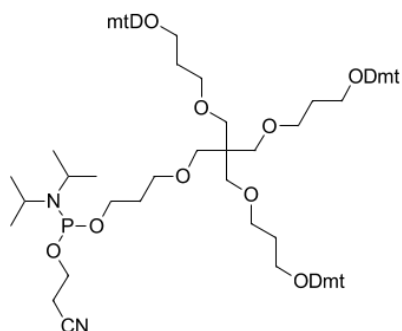
Long trebler phosphoramidite is a branching reagent for oligonucleotide synthesis allowing to synthesize branched DNA structures using a standard DNA synthesizer.



After the condensation of the trebler, three DNA branches begin to grow simultaneously with each step of the synthesis. Deblock of this construct gives rise to DNA containing a branching point. One arm (stem) is attached to the branch point with its 5'-end, and other arms (branches) are attached with their 3'-ends. Reverse amidites can be used to prepare constructs with different branch orientations. Repetitive condensations of trebler results in formation of DNA dendrimers.

Trebler amidite can be used to attach several modifier amidites to the 5'-end of an oligonucleotide - for example, three biotin residues can be attached at once.

This amidite does not require any special handling. Recommended coupling time is 5 minutes. No changes to deblock conditions are required.



Long trebler phosphoramidite

General properties

Appearance:	viscous yellowish oil
Molecular weight:	1475.78
CAS number:	1516489-83-0
Molecular formula:	C ₈₉ H ₁₀₇ N ₂ O ₁₅ P
Solubility:	soluble in acetonitrile, dichloromethane
Quality control:	NMR ¹ H, ³¹ P, HPLC-MS (95%)
Storage conditions:	Storage: 12 months after receipt at -20°C. Transportation: at room temperature for up to 3 weeks. Desiccate.
TN VED Code:	382200000

Oligo synthesis details

Coupling conditions: 15 min coupling time recommended

Cleavage conditions: ammonia, 2 h at room temperature

Deprotection conditions: identical to protected nucleobases