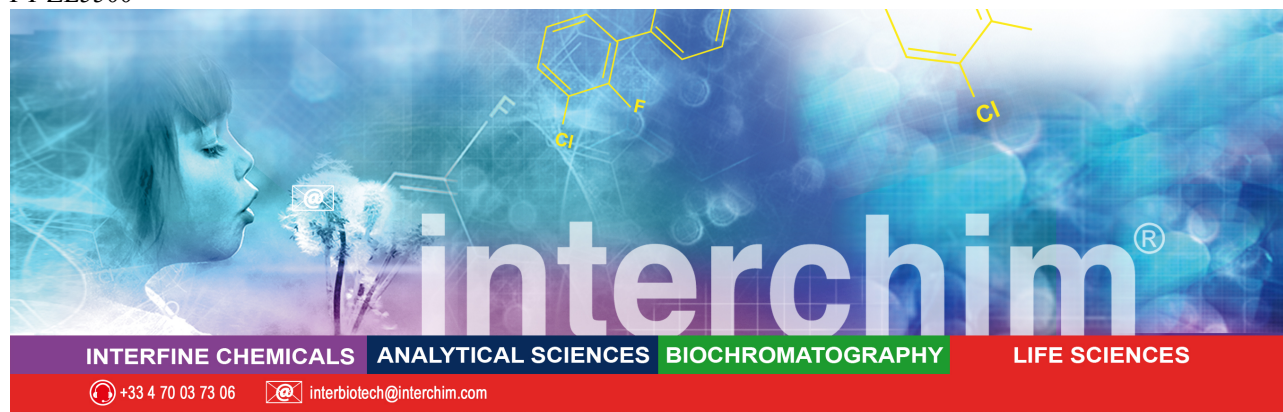


FT-ZL5500



## Alkyne Phosphoramidite, 5'-terminal

### Product Description

**Catalog #:** ZL550E, 250 mg  
ZL5500, 1 g  
ZL5501, 5 g  
ZL5502, 10 g

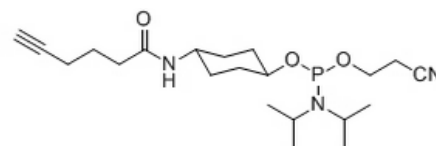
**Name :** **Alkyne Phosphoramidite, 5'-terminal**

trans-4-(5-Hexynoylamino)cyclohexyloxy-N,N-diisopropylamino-2-cyanoethoxyphosphine

**Other :** C<sub>21</sub>H<sub>36</sub>N<sub>3</sub>O<sub>3</sub>P MW : 409.50

**Soluble in :** acetonitrile and dichloromethane

**Storage :** Storage: 24 months after receipt at -20°C. Transportation: at room temperature for up to 3 weeks. Desiccate.



For Research Use Only

### Technical and Scientific Information

Phosphoramidite for the synthesis of oligonucleotides with 5'-terminal alkyne for Click Chemistry.

This alkyne amidite has several advantages over 5'-hexynyl phosphoramidite, 5'-butynyl-CEP, and other 5'-terminal alkyne phosphoramidites. First, it is solid compound which is easier to handle and dispense. And due to its structure, it is also more stable in solution, and has longer shelf life.

Diluent for this phosphoramidite is acetonitrile, 5 min coupling time is recommended. Because this amidite does not contain 5'-terminal DMT group, no 5'-deprotection needed. Oligonucleotides should be deblocked under standard conditions, and purified by PAGE, or ion exchange HPLC.

Oligonucleotides with this modification are ideal for the use in Click Chemistry.

#### Oligo synthesis details

Coupling conditions: standard coupling, identical to normal nucleobases

Cleavage conditions: standard deprotection

Deprotection conditions: no deprotection required. Compatible with standard deprotection reagents.

#### References

- **Aparin, I.O. et al.** 1-Phenylethynylpyrene (PEPy) as a novel blue-emitting dye for qPCR assay. *Analyst*, 141, 1331–1338 (2016)



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- **Astakhova, I.K.** *et al.* Branched DNA nanostructures efficiently stabilised and monitored by novel pyrene-perylene 2'-alpha-L-amino-LNA FRET pairs. *Chemical Communications*, 49(5), 511-511 (2013)
- **Taskova, M.** *et al.* Tandem Oligonucleotide Probe Annealing and Elongation To Discriminate Viral Sequence. *Analytical Chemistry*, 89(8), 4363–4366 (2017)

## Ordering information

Catalog size quantities and prices may be found at <http://www.interchim.com>.  
Please inquire for higher quantities (availability, shipment conditions).

Please contact InterBioTech – Interchim for any other information  
Hotline : +33(0)4 70 03 73 06 – [Interbiotech@interchim.com](mailto:Interbiotech@interchim.com)

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