
Custom Oligonucleotide Modification Guide

PLACING AN ORDER

Sequence Information (canonical nucleosides):

For standard DNA/RNA/LNA oligonucleotides, please provide the sequence information in the following style:

DNA = ACTG, U = 2'-Desoxyuridine; RNA = ACUG LNA = ACTG

For mixtures of different types please use for DNA bases normal letters, for RNA bases an introduced "r" and for LNA an introduced "+": e.g. GGrCrG+T+T

Synthesis Scale

Oligonucleotides can be synthesized on the following scales:

DNA = 40 nmol, 200 nmol, 1 µmol; RNA = 200 nmol, 1 µmol; LNA = 40 nmol, 200 nmol, 1 µmol

Large scale syntheses and yield syntheses are also available upon customer request.

Purification and Format

Oligonucleotides are purified by reverse-phase high performance liquid chromatography (RP-HPLC). De-salted oligos (without HPLC purification) are also available upon customer request. All oligonucleotides are lyophilized unless otherwise specified. Oligonucleotides may also be ordered as concentrated solutions upon customer request.

Degenerated/Wobble Bases

A mixture of different bases at the same nucleoside position is referred to as a wobble base. For wobble-base requests, please use the universal nomenclature (IUPC code).

| | | | | | | | | | | | |
|----------------------|----|----|----|----|----|----|-----|-----|-----|-----|------|
| Letter Symbol | M | R | W | S | Y | K | V | H | D | B | N |
| Base Mixture | AC | AG | AT | GC | CT | GT | AGC | ACT | AGT | GCT | AGCT |

Standard Modifications:

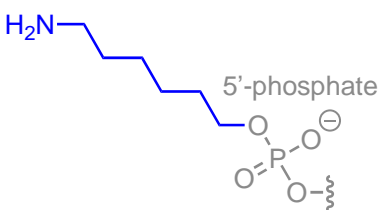
Modifications should be designated with an X, L, or Z, and the appropriate structure selected from the drop-down menu. If selected from our standard catalogue of click-modifications, a price calculation will be carried performed *via* the online tool.

Non-Standard Modifications

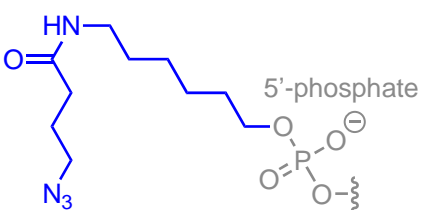
baseclick offers over 50 diverse chemical modifications that do not appear in our standard catalogue. To request a special modification, please leave a comment in the field underneath your oligo request.

Standard 5'-Modifications

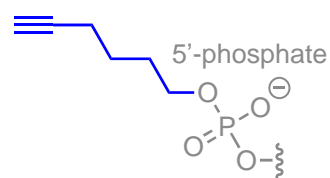
- The following modifications are immediately available at baseclick, and their prices can be calculated directly *via* the online oligonucleotide portal.



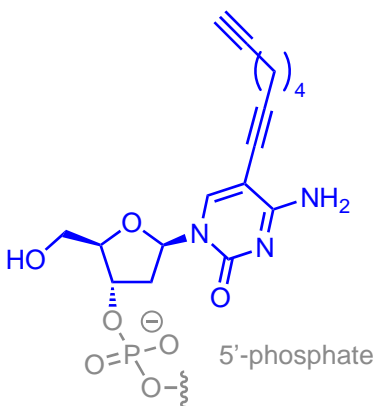
5'-Amino-C6



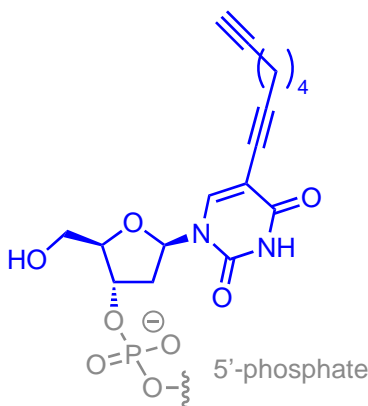
5'-Azide



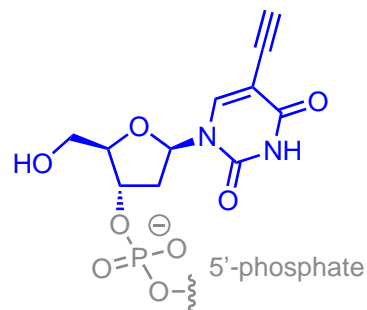
5'-Hexynyl



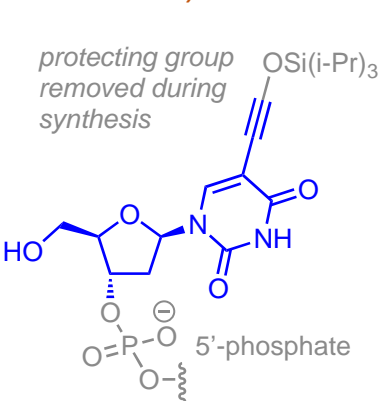
C8-Alkyne-dC



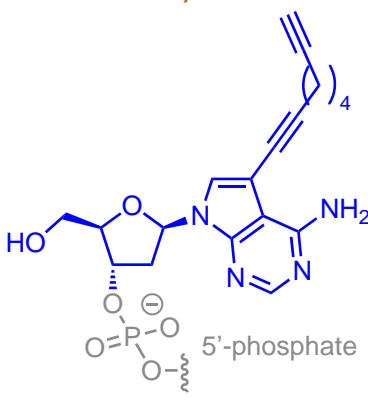
C8-Alkyne-dU



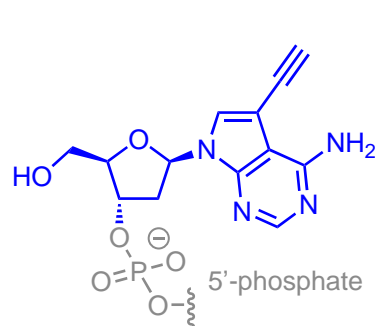
EdU



TIPS-EdU



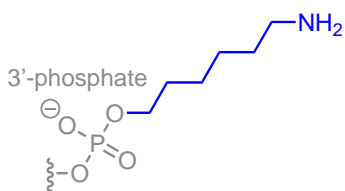
C8-Alkyne-dA



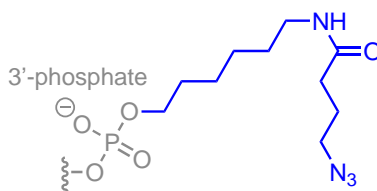
7-Ethynyl-dA

Standard 3'-Modifications

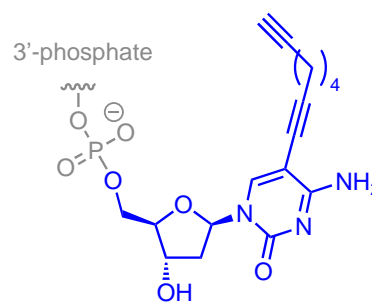
- The following modifications are immediately available at baseclick, and their prices can be calculated directly *via* the online oligonucleotide portal.



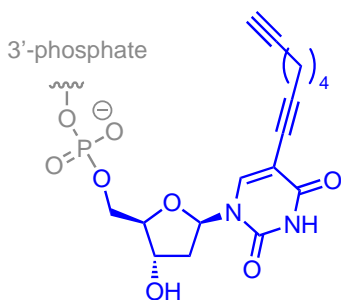
3'-Amino-C6



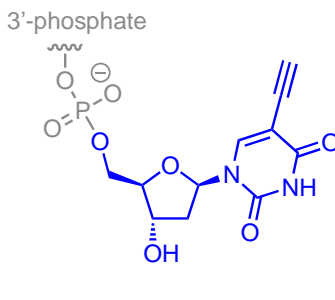
3'-Azide



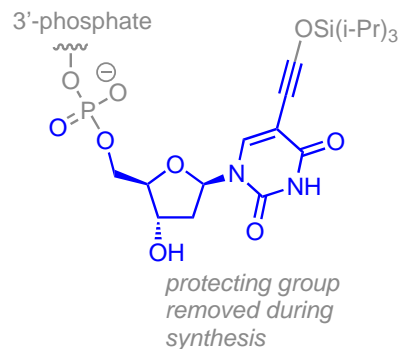
C8-Alkyne dC



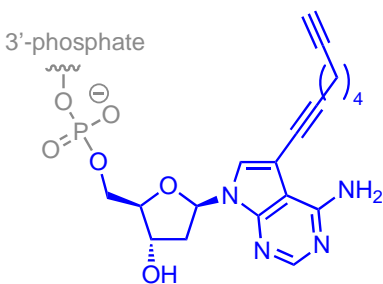
C8-Alkyne-dU



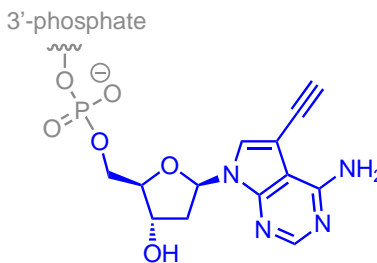
EdU



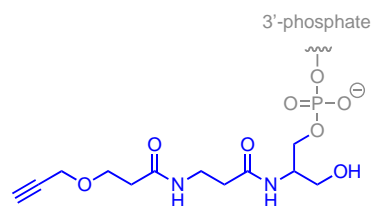
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C8-Alkyne-dA



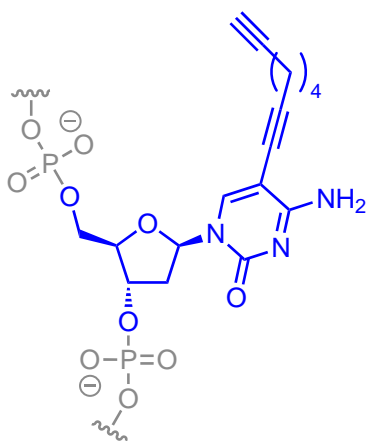
7-Ethynyl-dA



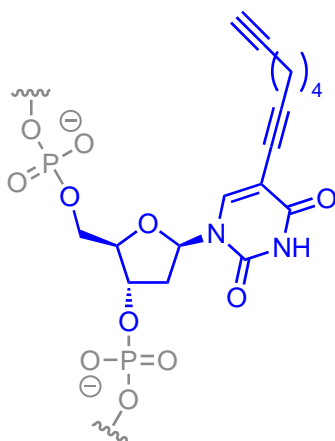
3'-Alkyne-Modifier

Standard Internal Modifications

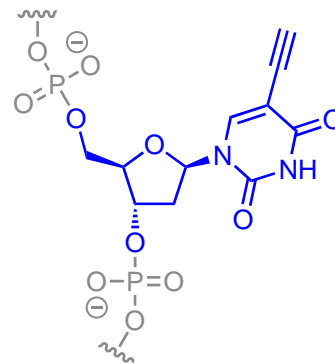
- The following modifications are immediately available at baseclick, and their prices can be calculated directly *via* the online oligonucleotide portal.



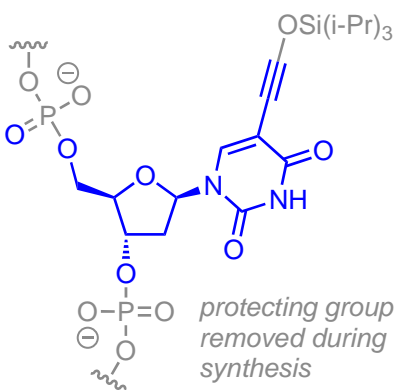
C8-Alkyne dC



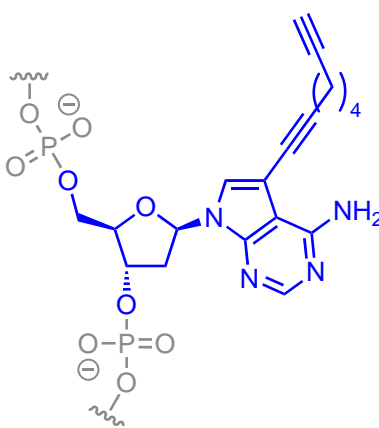
C8-Alkyne-dU



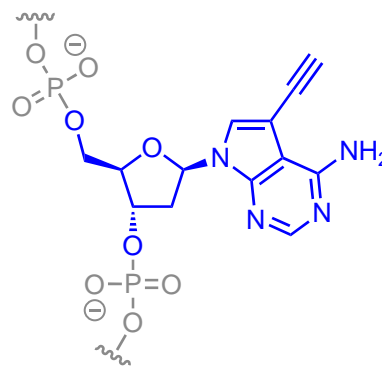
EdU



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C8-Alkyne-dA



7-Ethynyl-dA

Special (Non-Standard Modifications)

- The following modifications may be available upon request. To inquire if these or any other modifications are available, please leave a comment in the appropriate field of your request.

| Modification 5' | Internal Modification | Modification 3' |
|--------------------|-----------------------|-------------------|
| 6-FAM | Abasic I or II | 6-FAM |
| Amino Modifier C12 | BHQ1 | Amino Modifier C6 |
| BHQ1 | BHQ1-dT | BHQ1 |
| BHQ2 | BHQ2 | BHQ2 |
| Biotin | BHQ2-dT | BHQ3 |
| Biotin-TEG | Biotin-TEG | Biotin |
| Cy3 | Br-dU | Cy3 |
| Cy5 | Dabcyl-dT | Cy5 |
| Cy5.5 | Fluorescein-dT | Dabcyl |
| Dabcyl | TAMRA-dT | ddC |
| Maleimide | | Maleimide |
| PEG | | PEG |
| TAMRA | | TAMRA |

NHS-Ester and Click-Modifications

- Various modifications are available upon customer inquiry.

Don't see your desired modification here? Submit an inquiry through the online portal, and your special oligo may still be synthesizable.