
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:

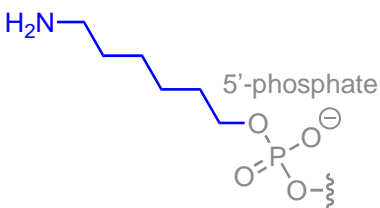
Modifications should be designated with an X, L, or Z, and the appropriate structure selected from the drop-down menu.

Non-Standard Modifications

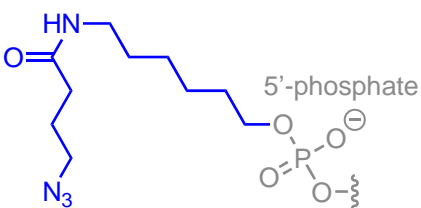
baseclick offers over 50 diverse chemical modifications that do not appear in our standard catalogue. To request a special modification, please leave a comment in the field underneath your oligo request.

Standard 5'-Modifications

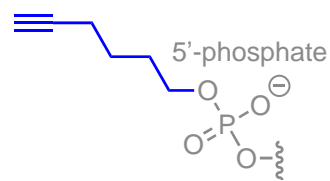
- The following modifications are immediately available at baseclick:



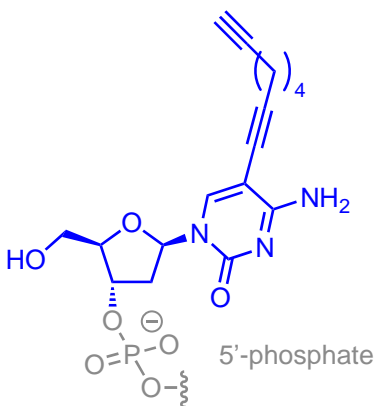
5'-Amino-C6



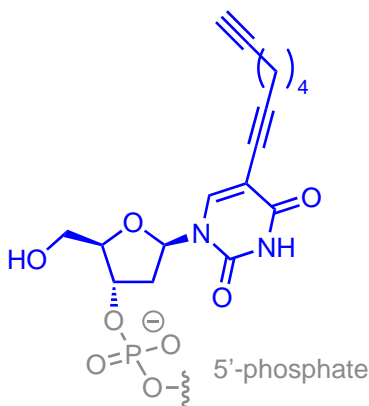
5'-Azide



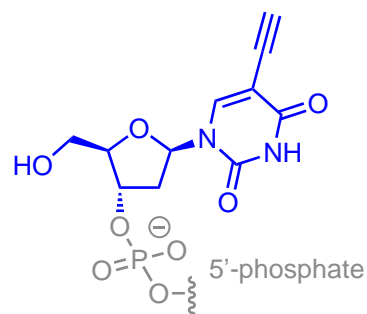
5'-Hexynyl



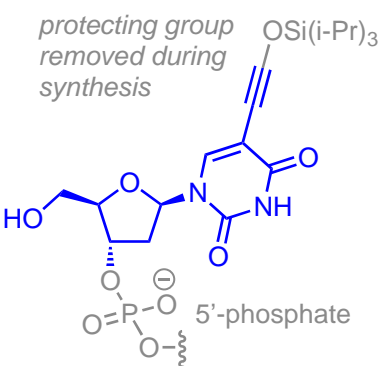
C8-Alkyne-dC



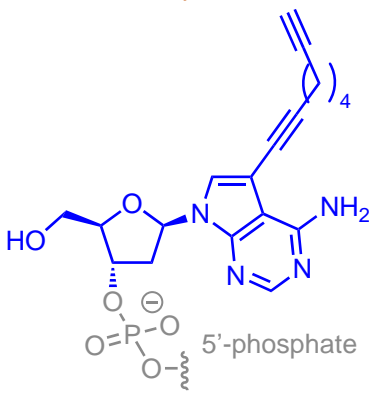
C8-Alkyne-dU



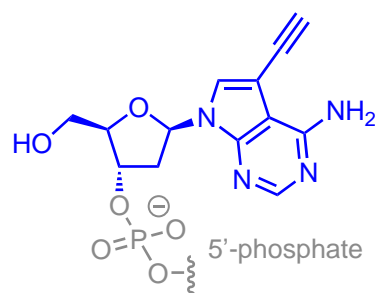
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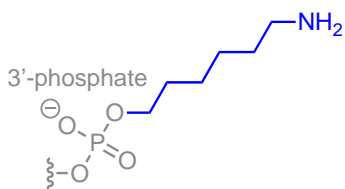
C8-Alkyne-dA



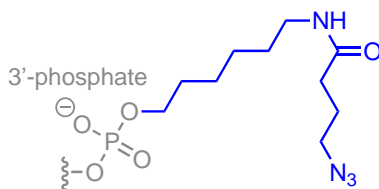
7-Ethynyl-dA

Standard 3'-Modifications

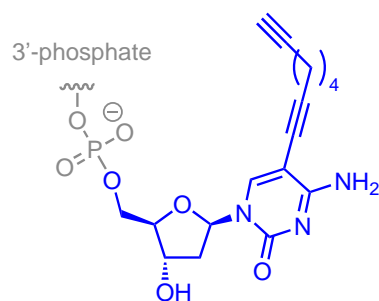
- The following modifications are immediately available at baseclick:



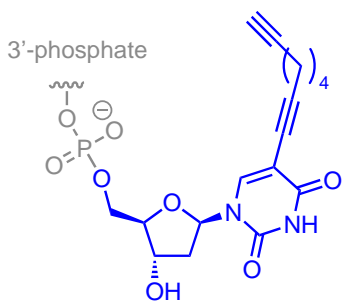
3'-Amino-C6



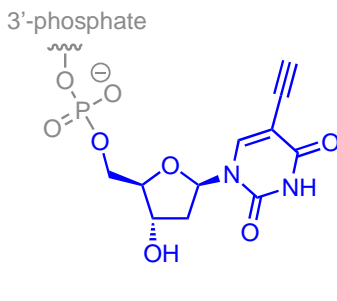
3'-Azide



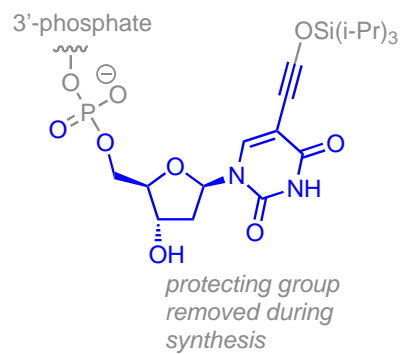
C8-Alkyne dC



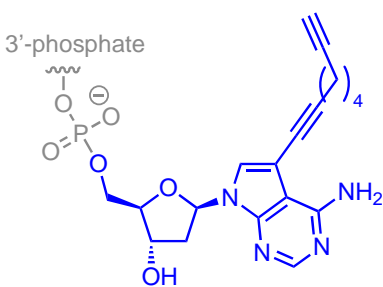
C8-Alkyne-dU



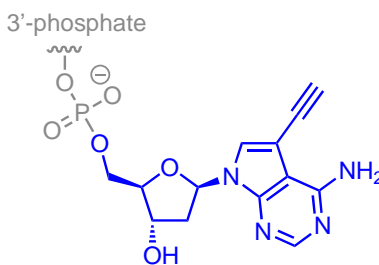
EdU



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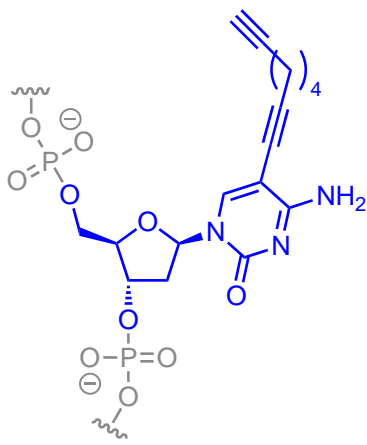
C8-Alkyne-dA



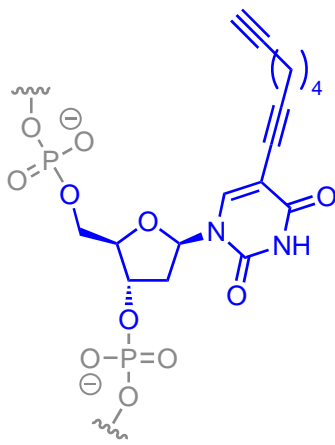
7-Ethynyl-dA

Standard Internal Modifications

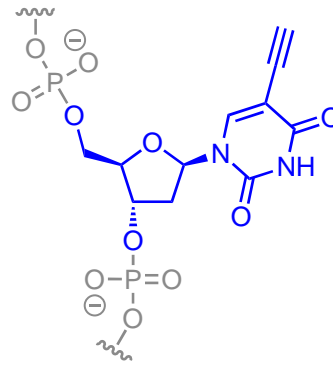
- The following modifications are immediately available at baseclick:



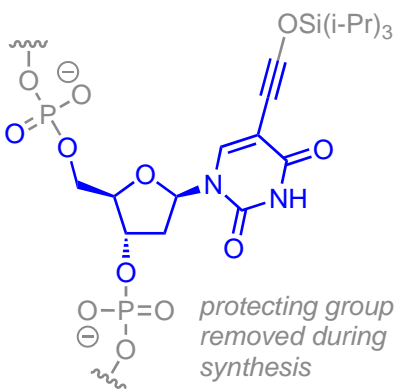
C8-Alkyne dC



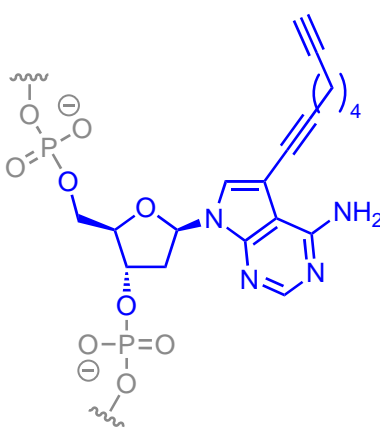
C8-Alkyne-dU



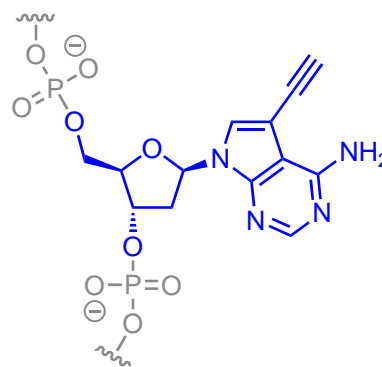
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C8-Alkyne-dA



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'

6-FAM
Amino Modifier C12
BHQ1
BHQ2
Biotin
Biotin-TEG
Cy3
Cy5
Cy5.5
Maleimide
PEG5/10/20kDA
TAMRA

Internal Modification

AbasicAlkyne
AbasicAmine
BHQ1
BHQ1-dT
BHQ2
BHQ2-dT
FAM dT/dC/dA
DBCO(C2)-dT/dC/dA
DBCO(PEG4)-dT/dC/dA

Modification 3'

6-FAM
BHQ0
BHQ1
BHQ2
BHQ3
Biotin
Cy3
Cy5
ddC
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.