2008

METKINEN
chemistry

Reagents and building blocks for oligonucleotide synthesis

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chemistry

Reagents for RNA and DNA synthesis

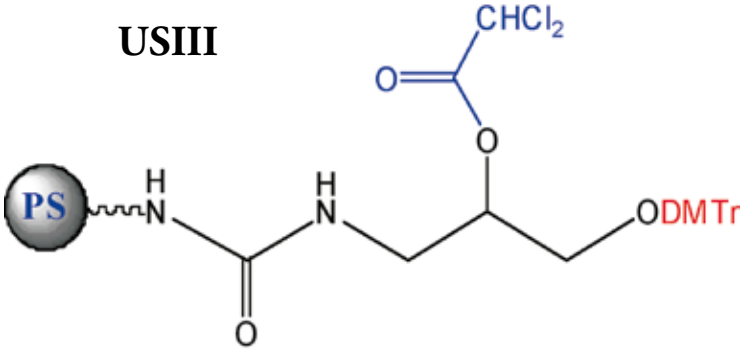
Universal Solid Support III

The universal support strategy offers the following clear advantages: eliminates the possibility of errors in parallel synthesis applications where up to 384 wells may contain different supports; eliminates the need for at least four supports for DNA synthesis and four for RNA synthesis; simplifies the preparation of oligonucleotides with modified or unusual nucleosides at the 3'-terminus.

Like our initial version of Universal Solid supports - USII, the new type of supports - USIII, would be appropriate for the production of DNA oligos, long and short, as well as those requiring mild deprotection. It is compatible with the synthesis of RNA, (including siRNA) as well as virtually any oligonucleotide analogs (2'-F-RNA, 2'-OMe-RNA, LNA, oligonucleotide N3'→P5' phosphoramidates, etc.). The reagent used for the cleavage/dephosphorylation step is commercially available and the procedures described are fully compatible with high-throughput Synthesis. The difference lies in the higher stability of USIII than that of USII upon prolong storage. In addition, the preparation of the new USIII support appears to be more consistent and reliable.

Universal Solid Supports, type USII and USIII are subject to proprietary rights of Glen Research Corporation and are synthesized and sold under the following licensed patents: US Patent No.: 6,770,754 and European Patent No.: 1404695. The new carbomoylation chemistry, resulting in the stable urea fragment, bridging the Universal linker and aminoalkylated solid phase, is subject to proprietary rights of Metkinen Chemistry (U.S. Patent Application Serial No 60/854,721; International Patent Application No. PCT/FI2007/050575).

USIII



METKINEN chemistry

Reagents for RNA and DNA synthesis

Universal Solid Support III

USIII – Truly Universal Solid Support for synthesis of DNA, RNA & any type of modified oligonucleotides.

Catalogue number: 103-00

Description: Chemically modified Macropourous Aminomethyl polystyrene. White to off-white powder.

Storage of dry compound: 1 year at +20°C

Loading: USIII with 20-80 µmol/g loadings is available. Please enquire for custom loading.

Oligo synthesis on USIII: Perform oligonucleotide assembly, using standard protocols, recommended by your synthesizer manufacturer. Upon the completion of synthesis wash the oligonucleotide bound support with pure acetonitrile. Do not perform any washing steps with solvents, containing basic reagents (diethylamine, triethylamine, dimethylamine, etc.) and water!

Cleavage: Cleave the oligo from the support using 3.5N - 4.5N ammonia in methanol (dilute cold 7N ammonia in methanol, Aldrich Cat. No 499145-100ML, with cold anhydrous methanol) at room temperature for 30 minutes. Do not use aqueous ammonium hydroxide and/or mixtures of ammonium hydroxide and methanol for cleavage!

Deprotection AFTER Cleavage:
Standard: After Cleavage, add 1 volume of 3.5N - 4.5N ammonia in methanol, seal and deprotect for 8-15 hours at 60 °C for removal of the protecting groups on the nucleobases.
or
Alternatively: add 1 volume of 30% ammonium hydroxide, seal and deprotect using the conditions appropriate for removal of the protecting groups on the nucleobases (e.g. at 55 °C for 5 hours).

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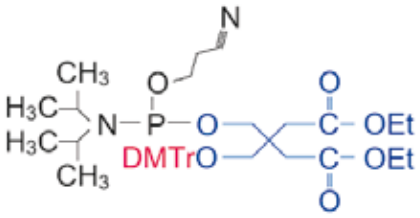
Reagents for RNA and DNA synthesis

Chemical Phosphorylation Reagent II

Chemical Phosphorylation Reagent (CPR II) contains a DMT group which can be left on the oligonucleotide and used for rapid purification of oligonucleotide 5'-phosphates by the popular DMTr-on technique, which employs disposable RP cartridges or "Trityl-on" RP HPLC purification. The DMTr group is removed with aqueous acid (e.g., 2%TFA in the case of Cartridge Purification) and the remaining linker is then eliminated after brief treatment with aqueous ammonium hydroxide (12 -15% ammonium hydroxide at room temperature for 15 minutes) to yield the 5'-phosphate.



[3-(4,4'-Dimethoxytrityloxy)-2,2-dicarboxyethyl]propyl-(2-cyanoethyl)-(N,N-diisopropyl)-phosphoramidite

Catalogue number: 103-10

Description: amorphous colorless glass

Storage of dry compound: 1 year at -20°C

Coupling Conditions: 6 minute coupling time.

Omit the capping step after the addition of this reagent!

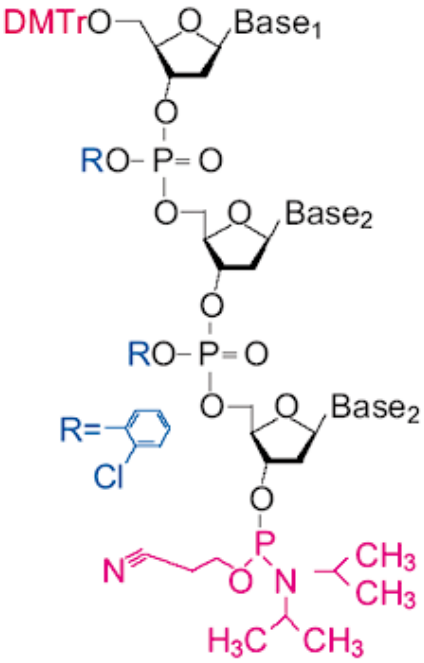
Reagents for RNA and DNA synthesis

Trinucleotide (TRIMER CODON) Phosphoramidites

Catalogue number: 103-20

Description: white to off-white powder

Storage of dry compound: 1 year at -20°C



Protein mutagenesis can be used to fine tune a variety of properties, such as improved stability to high temperatures, denaturants, or non-aqueous solvents; higher affinity binding to a target molecule; increased rates of enzymatic reactions; or changes of specificities. However, generating and finding these improved proteins can be a difficult task. One of the most popular methods is to make pools of degenerate oligonucleotides, which can be incorporated into the genes as cassettes or by PCR by using the degenerate oligo as a primer.[1] Degenerate oligonucleotides are synthesized as a mixture of A/C/G/T phosphoramidites (N) at the site of the codons to be mutated. Problems arise, though, from using an equimolar solution of each base. First there is a coding bias. Out of the 64 possible codon combinations of A, C, G and T, 18 code for leucine, arginine or serine, but only 2 for tryptophan or methionine. As a result, only 3% of the mutagenic oligonucleotides will contain methionine or tryptophan, and over 28% will contain either leucine, arginine or serine. In addition, the three nonsense codons will lead to chain termination in 4.7% of the sequences. There are ways to improve this situation. For instance, using two degenerate mixes of bases, N and G/C, on the DNA synthesizer to insert NNG/C into the sequence will halve the number of the most degenerate codons, but still code for all 20 amino acids. However, still 59% of the clones will code for just eight amino acids and 3% will have a stop codon inserted.

Reagents for RNA and DNA synthesis

Trinucleotide (TRIMER CODON) Phosphoramidites

The generation of redundant sequences and stop codons makes searching a clonal library inefficient. However, it is possible to improve the efficiency of this process by using a mixture of trinucleotide (trimer) phosphoramidites.[2–5] By synthesizing a set of trimers that cover all 20 amino acids, the mutation of a gene can be carried out at the codon level rather than at individual bases. Therefore, unlike other methods of mutagenesis, trimer phosphoramidites lead to no codon bias, no frame-shift mutations, and no production of stop codons, making them one of the most efficient tools to explore sequence space in protein regions that are important for function [6] – even in nonsaturating conditions.[7, 8]

References:

1. Zon, G., Gallo, K., Samson, C., Shao, K., Michael F. Summers, M., Byrd, R. Nucleic Acids Res, **1985,** 13, 8181-8196.
2. Kayushin, A., Korosteleva, M., Miroshnikov. Nucleos. Nucleot. Nucleic Acids, **2000,** 19, 1967-1976.
3. Kayushin, A., M. Korosteleva, . Miroshnikov, A. Nucleos Nucleot, **1999,** 18, 1531-1533.
4. Kayushin, A., M. Korosteleva, . Miroshnikov, A. W. Kosch, W., Zubov, D., Piel N. Nucleic Acids Res., **1996,** 24, 3748-3755.
5. Mauriala, T., Auriola, S., Azhayev, A., Kayushin, A., Korosteleva, M., Miroshnikov, A. J Pharm Biomed Anal, **2004.** 34, 199-206.
6. Yagodkin, A., Azhayev, A., Roivainen, J., Antopolsky, M., Kayushin, A., Korosteleva, M., Miroshnikov, A., Randolph, J., Mackie, H. Nucleos. Nucleot. Nucleic Acids **2007,** 26, 473-497.
7. Neylon, C. Nucleic Acids Res, **2004.** 32, 1448-59.
8. Sondek, J. and D. Shortle, Proc Natl. Acad. Sci. U S A, **1992.** 89,3581-3585.

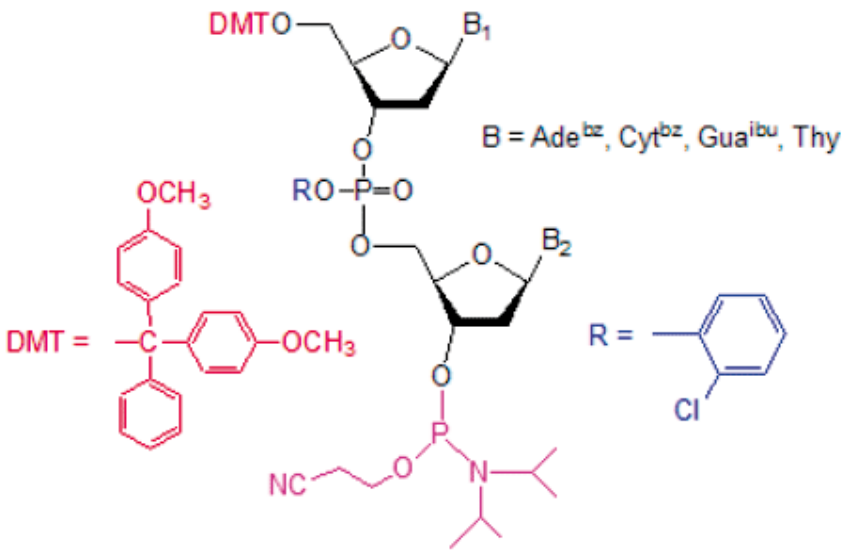
Reagents for RNA and DNA synthesis

Dimer Phosphoramidites

Catalogue number: 103-21

As an alternative to Trimer Phosphoramidites we offer less expensive Dimer Phosphoramidites for generation of randomised oligonucleotide libraries.[1] All 16 dimeric building blocks are available separately or as a custom mixture.

1. P.Neuner, R. Cortese, P. Monaci, Nucleic Acids Research **1998**, 26, 1223-1227.



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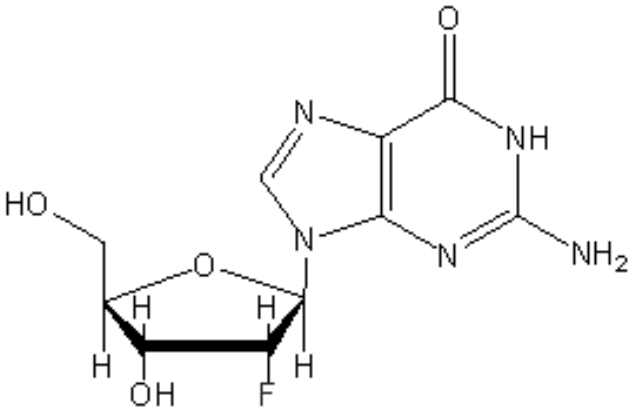
2'-Fluoro-2'-deoxynucleosides & Derivatives

2'-Fluoro-2'-Deoxyguanosine

9-(2-fluoro-2-deoxy-ß-D-ribofuranosyl)-guanine



Catalogue number: 203-15

CAS number: 125291-17-0

IUPAC name: 2'-Deoxy-2'-fluoroguanosine

Purity: > 99%

Description: white to off-white crystals

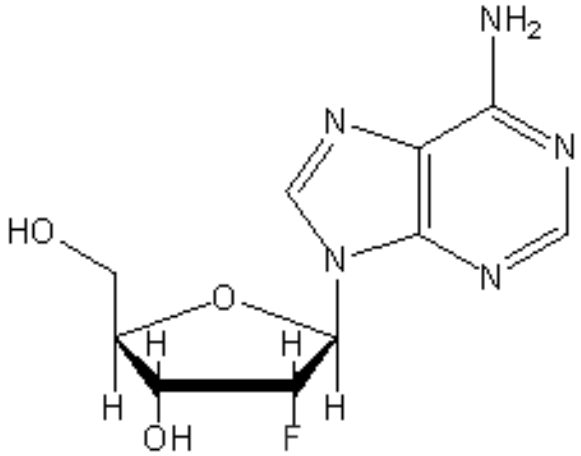
Storage of dry compound: 3 years at +4°C

Note: Gram to Kilogram scale production. Please request prices for bulk!

2'-Fluoro-2'-deoxynucleosides & Derivatives

2'-Fluoro-2'-Deoxyadenosine

9-(2-Deoxy-2-fluoro-ß-D-ribofuranosyl)-adenine



Catalogue number: 203-17

CAS number: 64183-27-3

IUPAC name: 2'-Deoxy-2'-fluoroadenosine

Purity: > 99%

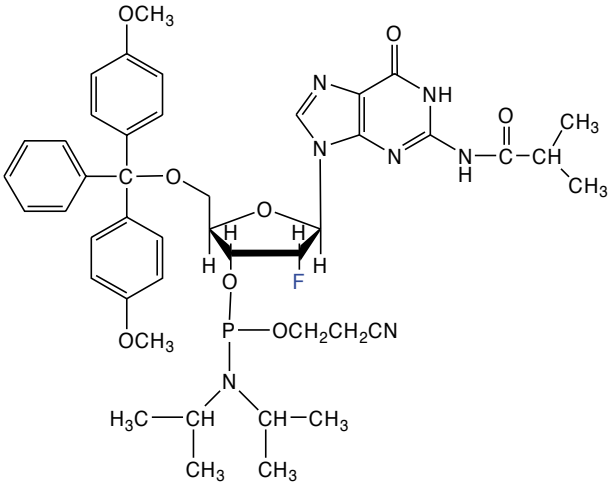
Description: white to off-white crystals

Storage of dry compound: 3 years at +4°C

Note: Gram to Kilogram scale production. Please request prices for bulk!

2'-Fluoro-2'-deoxynucleosides & Derivatives

2'-Fluoro-2'-Deoxyguanosine-3'-CE-phosphoramidite



Catalogue Number: 203-50

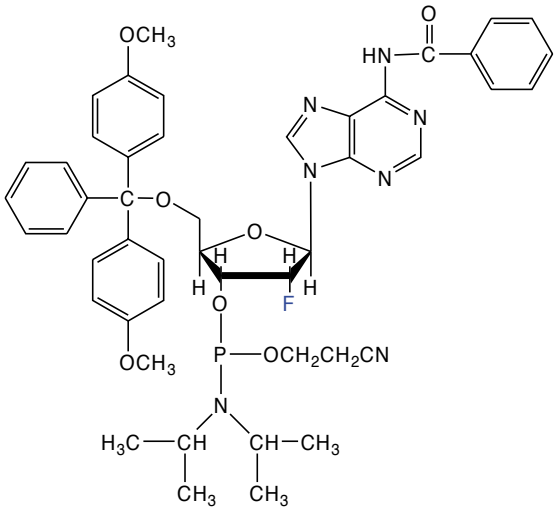
Purity: > 95%

Description: white to off-white amorphous powder

Storage of dry compound: 3 years at -20°C

2'-Fluoro-2'-deoxynucleosides & Derivatives

2'-Fluoro-2'-Deoxyadenosine-3'-CE-phosphoramidite



Catalogue Number: 203-51

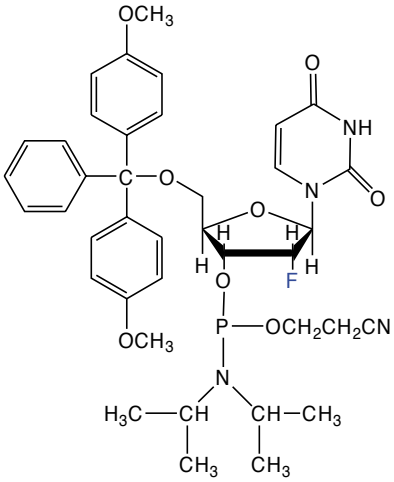
Purity: > 95%

Description: white to off-white amorphous powder

Storage of dry compound: 3 years at -20°C

2'-Fluoro-2'-deoxynucleosides & Derivatives

2'-Fluoro-2'-Deoxyuridine-3'-CE-phosphoramidite



Catalogue Number: 203-52

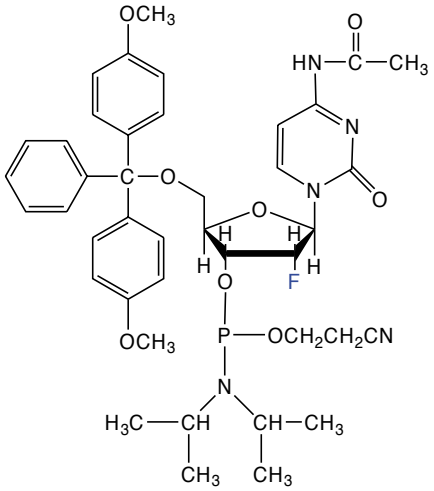
Purity: > 95%

Description: white to off-white amorphous powder

Storage of dry compound: 3 years at -20°C

2'-Fluoro-2'-deoxynucleosides & Derivatives

2'-Fluoro-2'-Deoxycytidine-3'-CE-phosphoramidite



Catalogue Number: 203-53

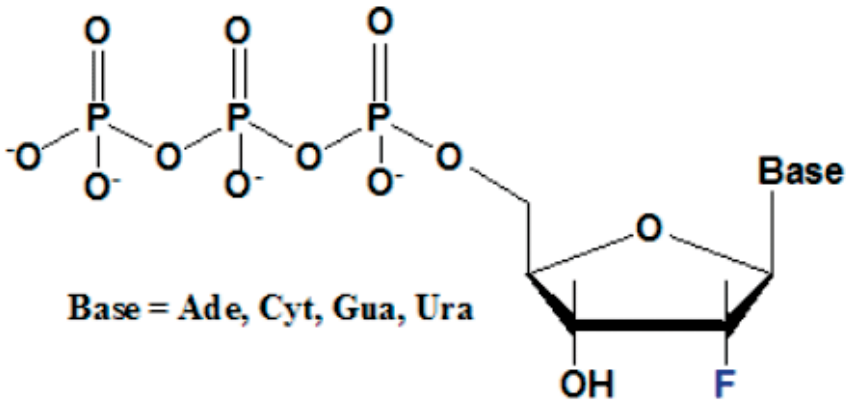
Purity: > 95%

Description: white to off-white amorphous powder

Storage of dry compound: 3 years at -20°C

2'-Fluoro-2'-deoxynucleosides & Derivatives

2'-Fluoro-2'-deoxynucleoside 5'-triphosphates



2'-Fluoro-2'-deoxynucleoside 5'-triphosphates are popular products for various applications: PCR, DNA- and RNA-polymerase, reverse transcriptase based assays, etc. Nowadays these compounds find diverse use in siRNA and Aptamer research.

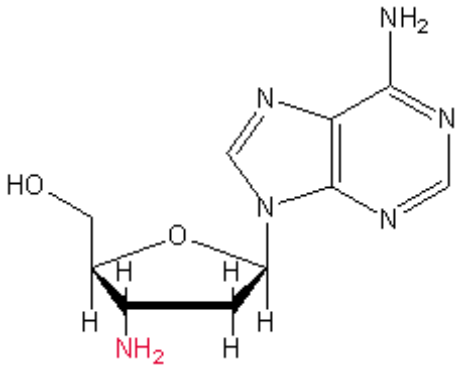
Product Note: All of our Triphosphates are lithium salts. They are analyzed by NMR, UV, HPLC and are accompanied by a Product Data Sheet

Cat no	Product	Package	Price in USD	Price in EUR
104-01	2'-Fluoro-2'-deoxyadenosine-5'-Triphosphate	10 µmol	120	75
104-02	2'-Fluoro-2'-deoxycytidine-5'-Triphosphate	10 µmol	120	75
104-03	2'-Fluoro-2'-deoxyguanosine-5'-Triphosphate	10 µmol	120	75
104-04	2'-Fluoro-2'-deoxyuridine-5'-Triphosphate	10 µmol	120	75
104-05	2'-Fluoro-2'-Deoxynucleoside-5'-Triphosphate Kit, containing 5 µmol of each	20 µmol (4x5 µmol)	220	143

3’ Amino -2’, 3’ Dideoxynucleosides & Derivatives

3’-Amino-2’,3’-Dideoxyadenosine

9-(3-Amino-2,3-dideoxy-ß-D-ribofuranosyl)adenine



Catalogue number: 203-11

CAS number: 7403-25-0

IUPAC name: 3’-Amino-2’,3’-dideoxyadenosine

Purity: > 99%

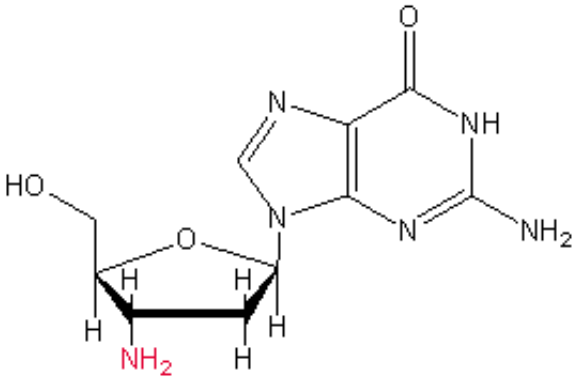
Description: white to off-white crystals

Storage of dry compound: 3 years at +4ºC

3' Amino -2', 3' Dideoxynucleosides & Derivatives

3'-Amino-2',3'-Dideoxyguanosine

9-(3-Amino-2,3-dideoxy-ß-D-ribofuranosyl)guanine



Catalogue number: 203-10

CAS number: 66323-49-7

IUPAC name: 3'-Amino-2',3'-dideoxyguanosine

Purity: > 99%

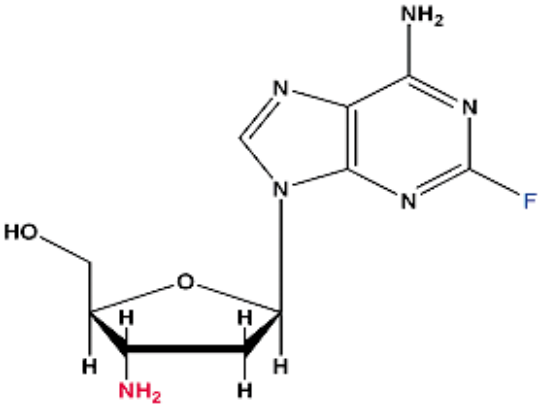
Description: white to off-white crystals

Storage of dry compound: 3 years at +4°C

3' Amino -2', 3' Dideoxynucleosides & Derivatives

3'- Amino-2',3'-dideoxy-2-fluoroadenosine

9-(3-amino-2,3-dideoxy- ß-D-ribofuranosyl)-2-fluoroadenine



Catalogue number: 203-30

IUPAC name: 3'- Amino-2',3'-dideoxy-2-fluoroadenosine

Purity: > 99%

Description: white to off-white crystals

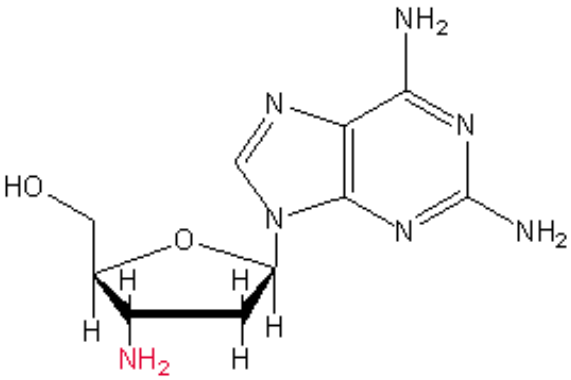
Storage of dry compound: 3 years at +4°C

Resistant to enzymatic deamination

3' Amino -2', 3' Dideoxynucleosides & Derivatives

3'-Amino-2',3'-Dideoxy-2,6 Diaminopurineriboside

9-(3-Amino-2,3-dideoxy-ß-D-ribofuranosyl)- 2,6-diaminopurine



Catalogue number: 203-12

IUPAC name: 3'-Amino-2',3'-dideoxy-2,6-di-aminopurineriboside

Purity: > 99%

Description: white to off-white crystals

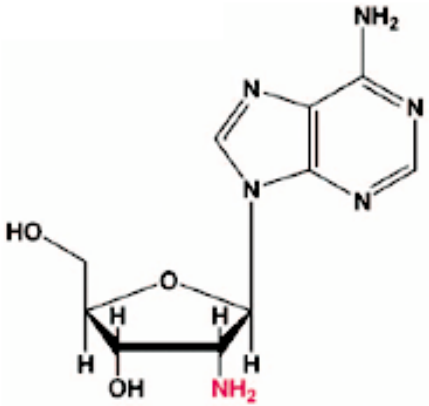
Storage of dry compound: 3 years at +4°C

For bulk quantities please enquire

Purine Nucleosides

2'-Amino-2'-deoxyadenosine

9-(2-amino-2-deoxy-ß-D-ribofuranosyl)-adenine



Catalogue number: 203-27

CAS number: 10414-81-0

IUPAC name: 2'-Amino-2'-deoxyadenosine

Purity: > 99%

Description: white to off-white crystals

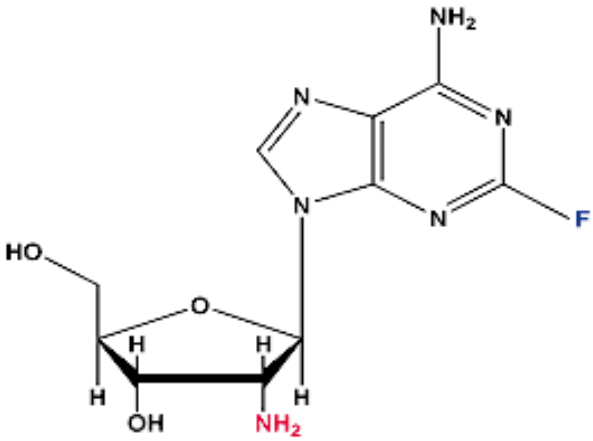
Storage of dry compound: 3 years at +4°C

For bulk quantities please enquire

Purine Nucleosides

2'-Amino-2'-deoxy-2-fluoroadenosine

9-(2-amino-2-deoxy-ß-D-ribofuranosyl)-2-fluoroadenine



Catalogue number: 203-31

IUPAC name: 2'-Amino-2'-deoxy-2-fluoroadenosine

Purity: > 99%

Description: white to off-white crystals

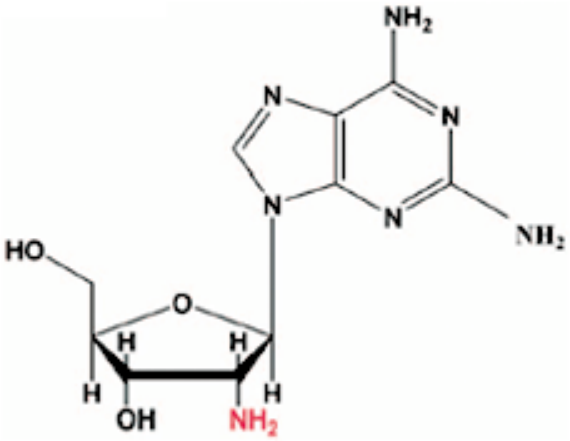
Storage of dry compound: 3 years at +4°C

Resistant to enzymatic deamination

Purine Nucleosides

2'-Amino-2'-deoxy-2,6-diaminopurineriboside

9-(2-amino-2-deoxy-ß-D-ribofuranosyl)-2,6-diaminopurine



Catalogue number: 203-28

IUPAC name: 2'-Amino-2'-deoxy-2,6-diaminopurineriboside

Purity: > 99%

Description: white to off-white crystals

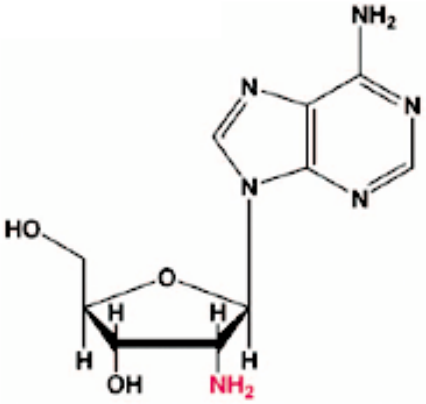
Storage of dry compound: 3 years at +4°C

For bulk quantities please enquire

Purine Nucleosides

2'-Amino-2'-deoxyguanosine

9-(2-amino-2-deoxy-ß-D-ribofuranosyl)-guanine



Catalogue number: 203-29

CAS number: 60966-26-9

IUPAC name: 2'-Amino-2'-deoxyguanosine

Purity: > 99%

Description: white to off-white crystals

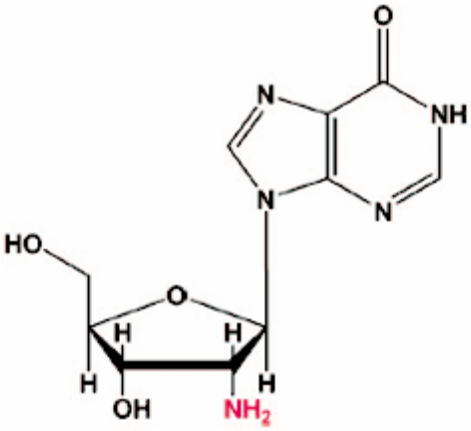
Storage of dry compound: 3 years at +4°C

For bulk quantities please enquire

Purine Nucleosides

2'-Amino-2'-deoxyinosine

9-(2-amino-2-deoxy-ß-D-ribofuranosyl)-hypoxanthine



Catalogue number: 203-41

IUPAC name: 2'-Amino-2'-deoxyinosine

Purity: > 99%

Description: white to off-white crystals

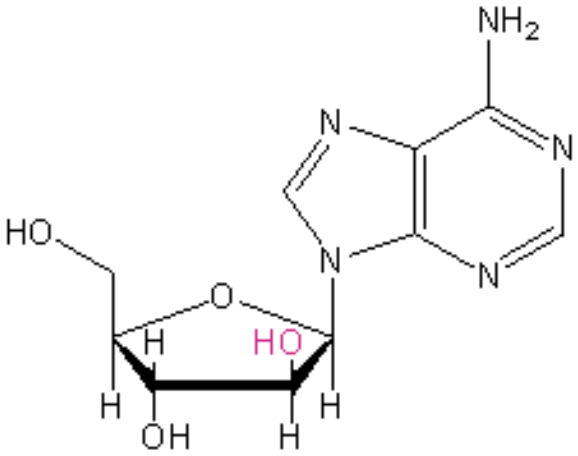
Storage of dry compound: 3 years at +4°C

For bulk quantities please enquire

Purine Nucleosides

Arabinofuranosyl-Adenine

9-(ß-D-Arabinofuranosyl)adenine



Catalogue number: 203-05

CAS number: 5536-17-4

IUPAC name: Arabinofuranosyl-adenine

Purity: > 99%

Description: white to off-white crystals

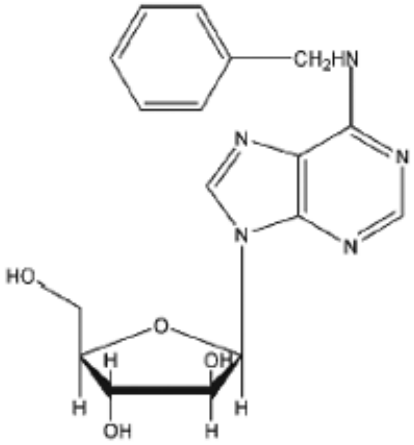
Storage of dry compound: 3 years at +4ºC

For bulk quantities please enquire

Purine Nucleosides

Arabinofuranosyl-6-Benzylaminopurine

9-(ß-D-arabinoribofuranosyl)-6-Benzylaminopurine



Catalogue number: 203-20

IUPAC name: Arabinofuranosyl-6-Benzyl-aminopurine

Purity: > 99%

Description: white to off-white crystals

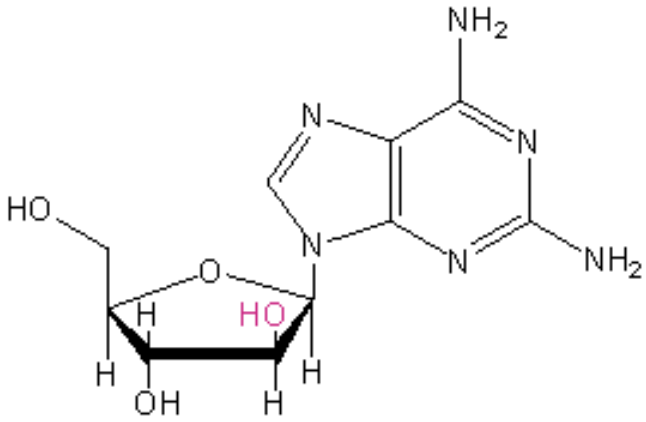
Storage of dry compound: 3 years at +4°C

For bulk quantities please enquire

Purine Nucleosides

Arabinofuranosyl-2,6-Diaminopurine

9-(ß-D-Arabinofuranosyl)-2,6-diaminopurine



Catalogue number: 203-06

IUPAC name: Arabinofuranosyl-2,6- diaminopurine

Purity: > 99%

Description: white to off-white crystals

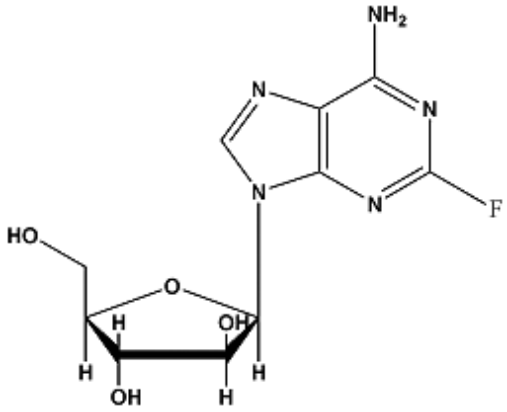
Storage of dry compound: 3 years at +4ºC

For bulk quantities please enquire

Purine Nucleosides

Arabinofuranosyl-2-fluoroadenine

9-(ß-D-arabinoribofuranosyl)-2-fluoroadenine



Catalogue number: 203-32

CAS number: 21679-14-1

IUPAC name: Arabinofuranosyl-2-fluoroadenine

Purity: > 99%

Description: white to off-white crystals

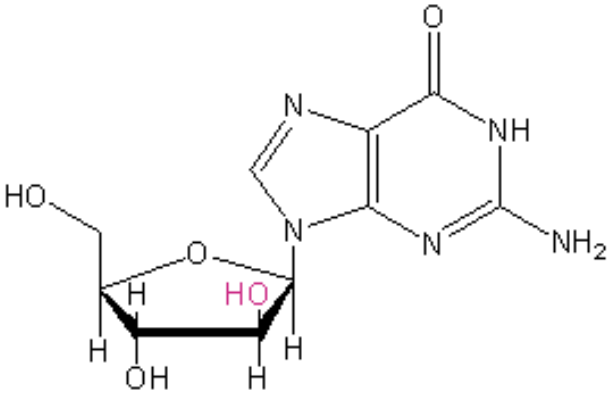
Storage of dry compound: 3 years at +4°C

Resistant to enzymatic deamination

Purine Nucleosides

Arabinofuranosyl-Guanine

9-(ß-D-Arabinofuranosyl)guanine



Catalogue number: 203-03

CAS number: 38819-10-2

IUPAC name: Arabinofuranosyl-guanine

Purity: > 99%

Description: white to off-white crystals

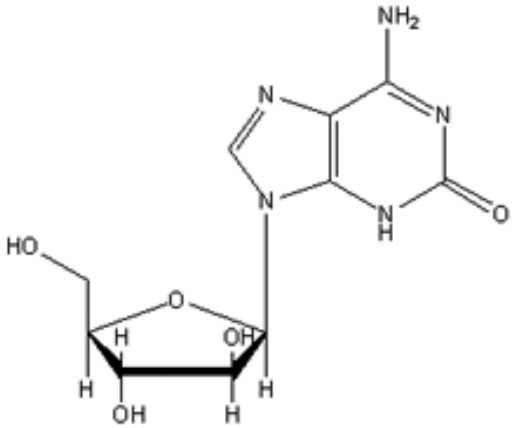
Storage of dry compound: 3 years at +4°C

For bulk quantities please enquire

Purine Nucleosides

Arabinofuranosyl-isoguanine

9-(ß-D-arabinoribofuranosyl)-isoguanine



Catalogue number: 203-37

IUPAC name: Arabinofuranosyl-isoguanine

Purity: > 98%

Description: white to off-white crystals

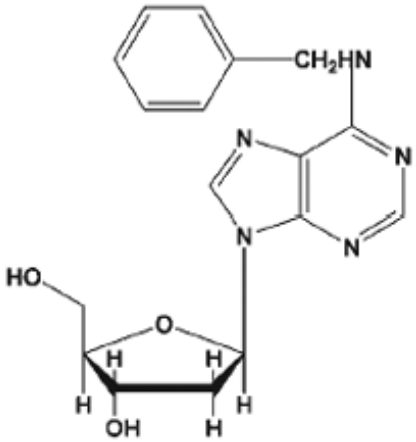
Storage of dry compound: 3 years at +4°C

For bulk quantities please enquire

Purine Nucleosides

6-Benzylaminopurine 2'-deoxyriboside

9-(2-deoxy- ß-D-ribofuranosyl)-6-Benzylaminopurine



Catalogue number: 203-21

IUPAC name: 6-Benzylaminopurine 2'-deoxyriboside

Purity: > 99%

Description: white to off-white crystals

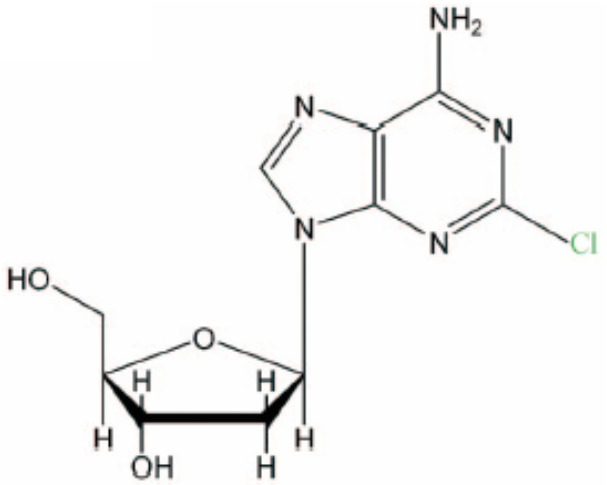
Storage of dry compound: 3 years at +4°C

For bulk quantities please enquire

Purine Nucleosides

2-Chloro-2'-deoxyadenosine (2-CdA, cladribine)

9-(2-deoxy-ß-D-ribofuranosyl)-2-chloro-adenine



Catalogue number: 203-25

CAS number: 4291-63-8

IUPAC name: 2-Chloro-2'-deoxyadenosine

Purity: > 99%

Description: white to off-white crystals

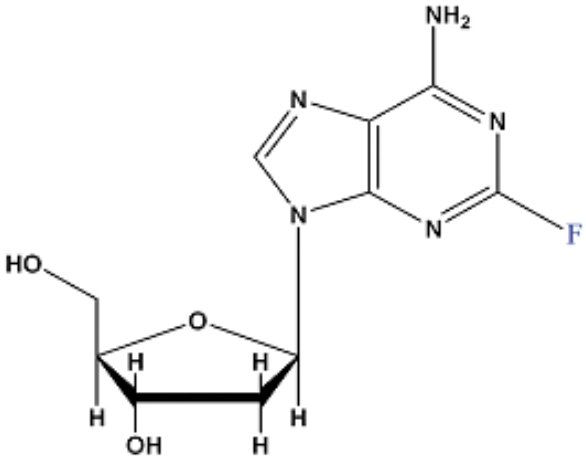
Storage of dry compound: 3 years at +4°C

For bulk quantities please enquire

Purine Nucleosides

2'-deoxy-2-fluoroadenosine

(9-(2-deoxy-ß-D-ribofuranosyl)-2-fluoroadenine



Catalogue number: 203-35

CAS number: 21679-12-9

IUPAC name: 2'-deoxy-2-fluoroadenosine

Purity: > 99%

Description: white to off-white crystals

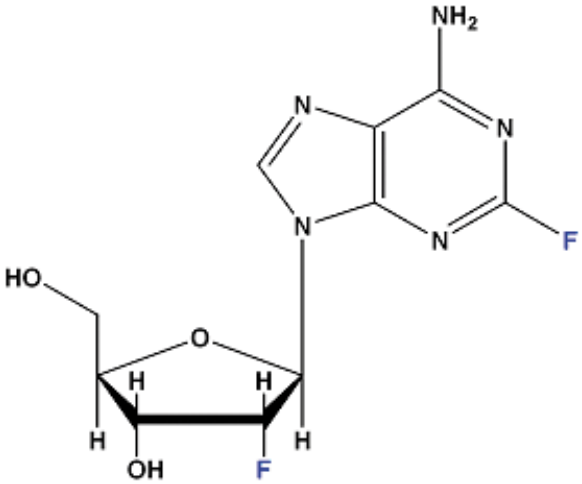
Storage of dry compound: 3 years at +4°C

Resistant to enzymatic deamination.

Purine Nucleosides

2'-Fluoro-2'-deoxy-2-fluoroadenosine

9-(2-fluoro-2-deoxy-ß-D-ribofuranosyl)-2-fluoroadenine



Catalogue number: 203-36

IUPAC name: 2'-deoxy-2'-fluoro-2-fluoro-adenosine

Purity: > 99%

Description: white to off-white crystals

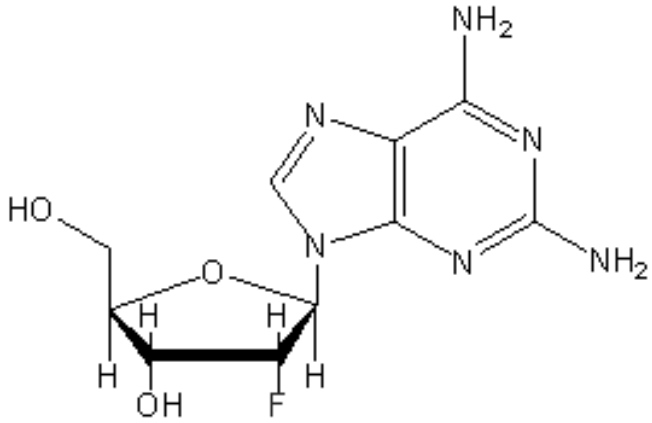
Storage of dry compound: 3 years at +4°C

Resistant to enzymatic deamination.

Purine Nucleosides

2'-Fluoro-2'-Deoxy-2,6-Diaminopurineriboside

9-(2-Deoxy-2-fluoro-ß-D-ribofuranosyl)-2,6-diaminopurine



Catalogue number: 203-18

IUPAC name: 2'-Deoxy-2'-fluoro-2,6-diaminopurineriboside

Purity: > 99%

Description: white to off-white crystals

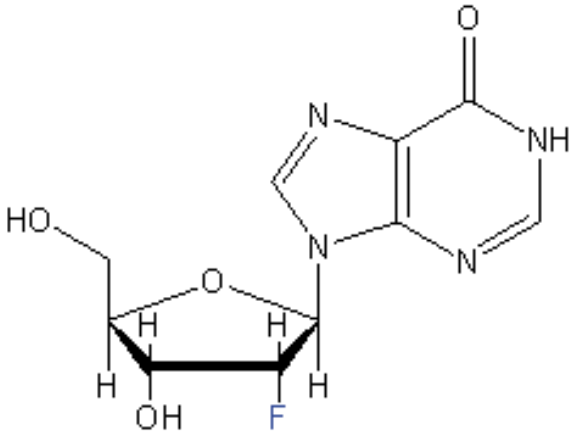
Storage of dry compound: 3 years at +4°C

For bulk quantities please enquire

Purine Nucleosides

2'-Fluoro-2'-Deoxyinosine

9-(2-Deoxy-2-fluoro-ß-D-ribofuranosyl)hypoxanthine



Catalogue number: 203-14

IUPAC name: 2'-Deoxy-2'-fluoroinosine

Purity: > 99%

Description: white to off-white crystals

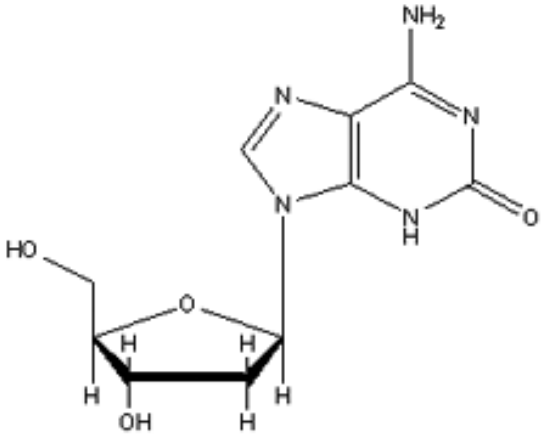
Storage of dry compound: 3 years at +4°C

For bulk quantities please enquire

Purine Nucleosides

2'-deoxyisoguanosine

9-(2-deoxy-ß-D-ribofuranosyl)-isoguanine



Catalogue number: 203-38

CAS number: 106449-56-3

IUPAC name: 2'-Deoxyisoguanosine

Purity: > 98%

Description: white to off-white crystals

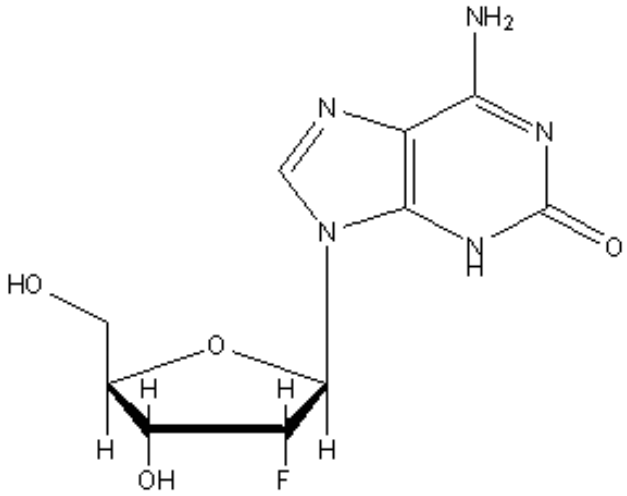
Storage of dry compound: 3 years at +4ºC

For bulk quantities please enquire

Purine Nucleosides

2'-deoxy-2'-fluoroisoguanosine

9-(2-deoxy-2-fluoro-ß-D-ribofuranosyl)-isoguanine



Catalogue number: 203-40

IUPAC name: 2'-Deoxy-2'-fluoroisoguanosine

Purity: > 98%

Description: white to off-white crystals

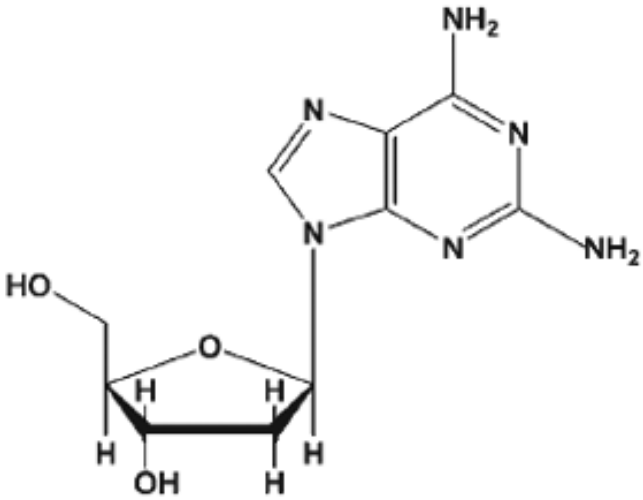
Storage of dry compound: 3 years at +4°C

For bulk quantities please enquire

Purine Nucleosides

2,6-Diaminopurine 2'-deoxyriboside

9-(2-deoxy-ß-D-ribofuranosyl)-2,6-Diaminopurine



Catalogue number: 203-23

Description: white to off-white crystals

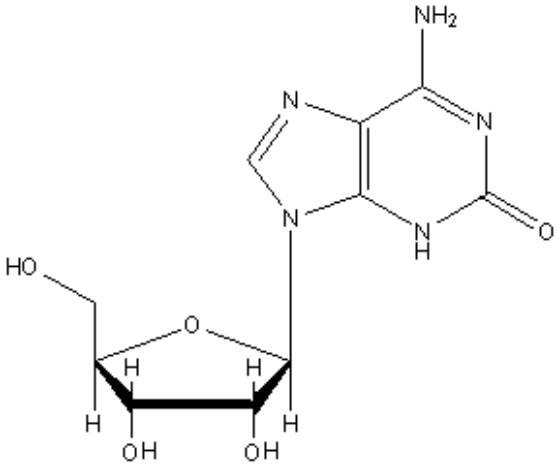
Storage of dry compound: 3 years at +4°C

For bulk quantities please enquire

Purine Nucleosides

Isoguanosine

9-(ß-D-ribofuranosyl)-isoguanine



Catalogue number: 203-39

CAS number: 1818-71-9

IUPAC name: Isoguanosine

Purity: > 98%

Description: white to off-white crystals

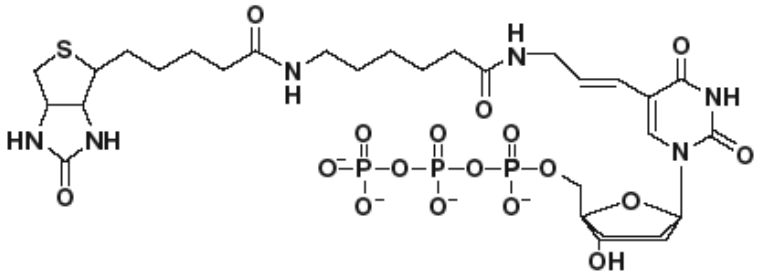
Storage of dry compound: 3 years at +4°C

For bulk quantities please enquire

Labeled 2'-Deoxyuridine 5'-Triphosphates

Biotin-11-dUTP

5-[3-(6-(Biotinylamido)hexanoylamido)propenyl]-2'-deoxyuridine-5'-triphosphate, triethylammonium or tetralithium (optional) salt



Catalogue number: 303-11

Diluent: dd-H2O

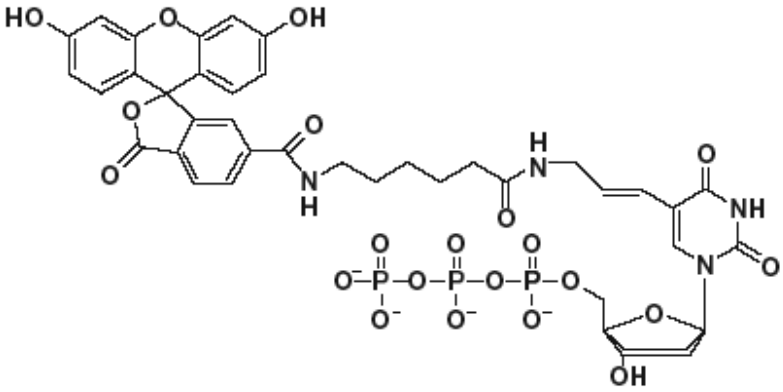
Storage: Freezer storage, -10 to -30°C, dry.

Stability in Solution: 1 month as 1 mM solution in water or neutral buffers at +4°C, 6 months as 1 mM solution in water or neutral buffers at -20°C.

Labeled 2'-Deoxyuridine 5'-Triphosphates

6-FAM-11-dUTP

5-[3-(6-(fluoresceinyl-6-carboxamido)hexanoylamido)-propenyl]-2'-deoxyuridine-5'-triphosphate, triethylammonium or tetralithium (optional) salt



Catalogue number: 303-12

Diluent: dd-H2O

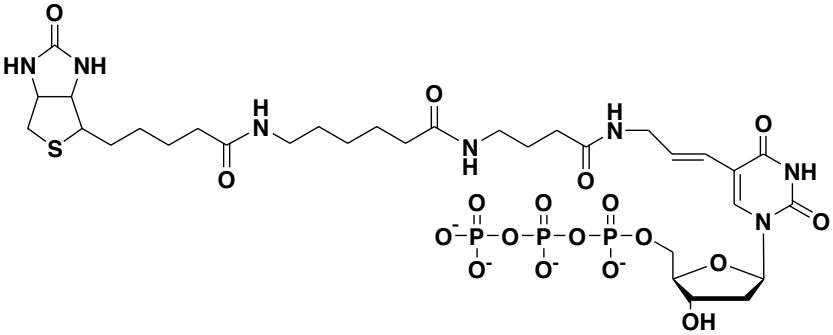
Storage: Freezer storage in dark, -10 to -30°C, dry.

Stability in Solution: 1 month as 1 mM solution in water or neutral buffers at +4°C, 6 months as 1 mM solution in water or neutral buffers at -20°C in dark.

Labeled 2'-Deoxyuridine 5'-Triphosphates

Biotin-16-dUTP

5-[3-{3-(6-(Biotinylamido)hexanoylamido)bytyrylamido}propenyl]-2'-deoxyuridine-5'-triphosphate, triethylammonium or tetralithium (optional) salt



Catalogue Number: 303-14

Diluent: dd-H_2O

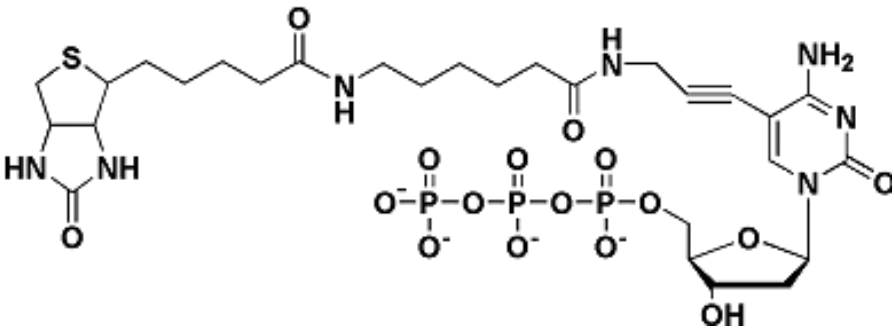
Storage: Freezer storage, -10 to -30°C, dry.

Stability in Solution: 1 month as 1 mM solution in water or neutral buffers at +4°C, 6 months as 1 mM solution in water or neutral buffers at -20°C.

Labeled 2'-Deoxycytidine 5'-Triphosphates

Biotin-11-dCTP

5-[3-(6-(Biotinylamido)hexanoylamido)propenyl]-2'-deoxycytidine-5'-triphosphate, triethylammonium or tetralithium (optional) salt



Catalogue number: 303-21

Diluent: dd-H2O

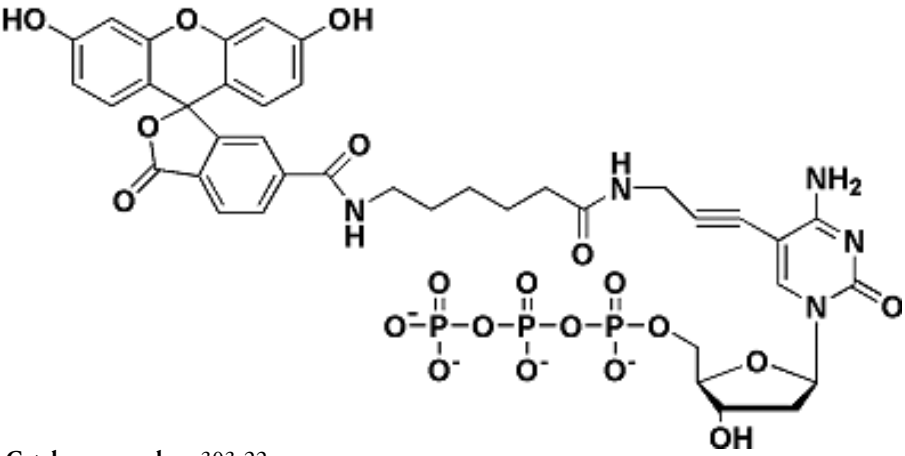
Storage: Freezer storage, -10 to -30°C, dry.

Stability in Solution: 1 month as 1 mM solution in water or neutral buffers at +4°C, 6 months as 1 mM solution in water or neutral buffers at -20°C.

Labeled 2'-Deoxycytidine 5'-Triphosphates

6-FAM-11-dCTP

5-[3-(6-(fluoresceinyl-6-carboxamido)hexanoylamido)-propenyl]-2'-deoxycytidine-5'-triphosphate, triethylammonium or tetralithium (optional) salt



Catalogue number: 303-22

Diluent: dd-H2O

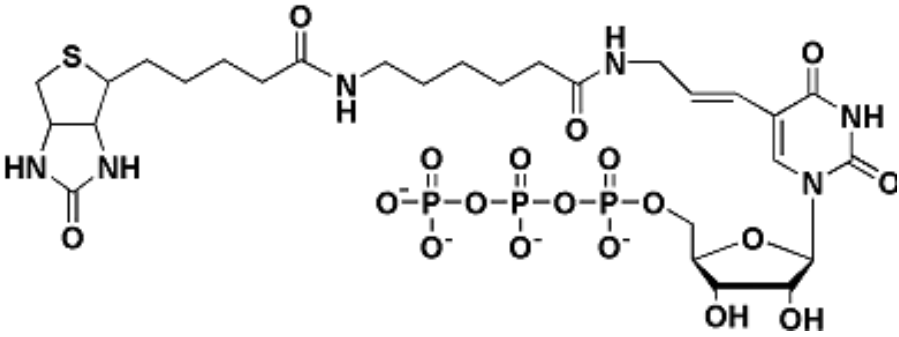
Storage: Freezer storage in dark, -10 to -30°C, dry.

Stability in Solution: 1 month as 1 mM solution in water or neutral buffers at +4°C in dark, 6 months as 1 mM solution in water or neutral buffers at -20°C in dark.

Labeled uridine 5'-Triphosphates

Biotin-11-UTP

5-[3-(6-(Biotinylamido)hexanoylamido)propenyl]-uridine-5'-triphosphate, triethylammonium or tetralithium (optional) salt



Catalogue number: 303-31

Diluent: dd-H2O

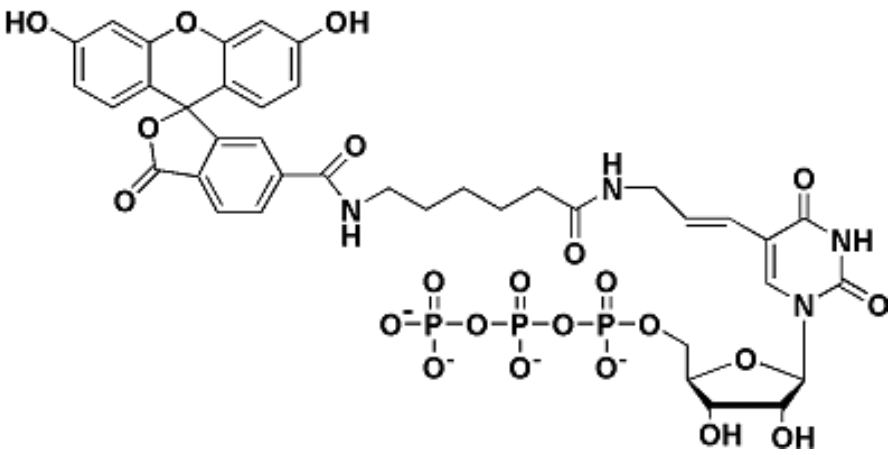
Storage: Freezer storage, -10 to -30°C, dry.

Stability in Solution: 1 month as 1 mM solution in water or neutral buffers at +4°C, 6 months as 1 mM solution in water or neutral buffers at -20°C.

Labeled uridine 5'-Triphosphates

6-FAM-11-UTP

5-[3-(6-(fluoresceinyl-6-carboxamido)hexanoylamido)-propenyl]- uridine-5'-triphosphate, triethylammonium or tetralithium (optional) salt



Catalogue number: 303-32

Diluent: dd-H2O

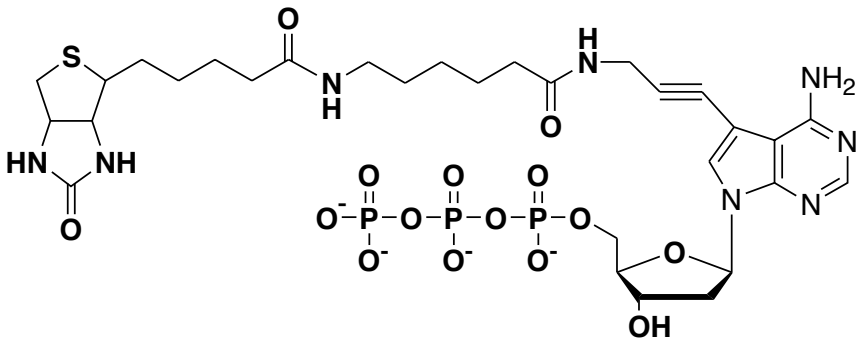
Storage: Freezer storage in dark, -10 to -30°C, dry.

Stability in Solution: 1 month as 1 mM solution in water or neutral buffers at +4°C in dark, 6 months as 1 mM solution in water or neutral buffers at -20°C in dark.

Labeled 2'-Deoxyadenasine 5'-Triphosphates

Biotin-11-dATP

5-[3-{3-(6-(Biotinylamido)hexanoylamido)bytyrylamido}propenyl]-2'-deoxy-7-deazaadenosine-5'-triphosphate, triethylammonium or tetralithium (optional) salt



Catalogue number: 303-71

Diluent: dd-H_2O

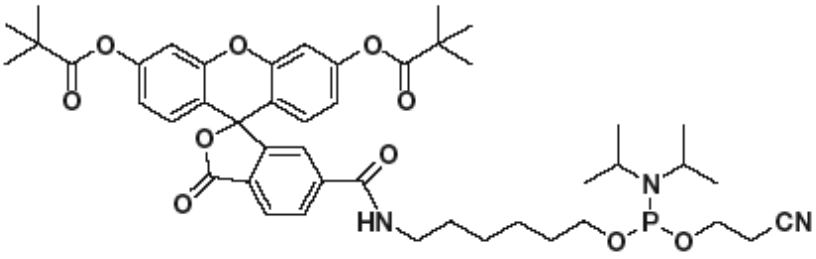
Storage: Freezer storage, -10 to -30°C, dry.

Stability in Solution: 1 month as 1 mM solution in water or neutral buffers at +4°C, 6 months as 1 mM solution in water or neutral buffers at -20°C.

FAM Phosphoramidites and CPG

5'-Fluorescein phosphoramidite (6-FAM)

[(3',6'-dipivaloylfluoresceinyl)-6-carboxamidohexyl]-1-O-(2-cyanoethyl)-(N,N-diisopropyl)-phosphoramidite



Catalogue number: 303-41

Diluent: Anhydrous Acetonitrile

Coupling: 3 minute coupling time recommended

Deprotection: No changes needed from standard method recommended by synthesizer manufacturer.

Storage: Freezer storage, -10 to -30°C, dry.

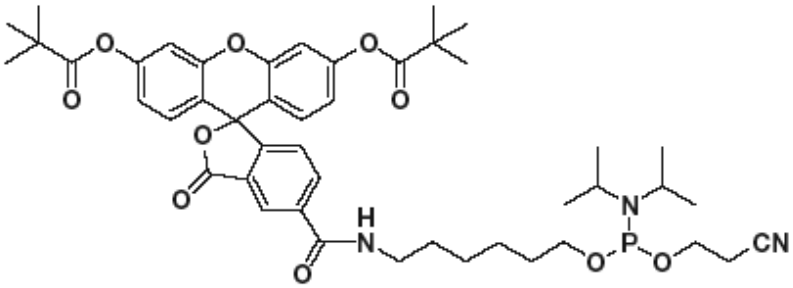
Stability in Solution: 2-3 days, <90% efficient after 4 days

Store labeled oligo in the dark, either dry or in a neutral aqueous media at -20°C.
Do not store crude fluorescently labeled oligonucleotides in ammonia.

FAM Phosphoramidites and CPG

5'-Fluorescein phosphoramidite (5-FAM)

[(3',6'-dipivaloylfluoresceinyl)-5-carboxamidohexyl]-1-O-(2-cyanoethyl)-(N,N-diisopropyl)-phosphoramidite



Catalogue number: 303-42

Diluent: Anhydrous Acetonitrile

Coupling: 3 minute coupling time recommended

Deprotection: No changes needed from standard method recommended by synthesizer manufacturer.

Storage: Freezer storage, -10 to -30°C, dry.

Stability in Solution: 2-3 days, <90% efficient after 4 days

Store labeled oligo in the dark, either dry or in a neutral aqueous media at -20°C.
Do not store crude fluorescently labeled oligonucleotides in ammonia.

FAM Phosphoramidites and CPG

Fluorescein phosphoramidite (I)

(2S,4R)-N-(6-(3',6'-dipivaloylfluoresceinyl-5-carboxamido)hexanoylamido)-4-O-[(2-cyanoethyl)-(N,N-diisopropyl)-phosphoramidite]-2-(dimethoxytrityloxymethyl)pyrrolidine

Catalogue number: 303-43

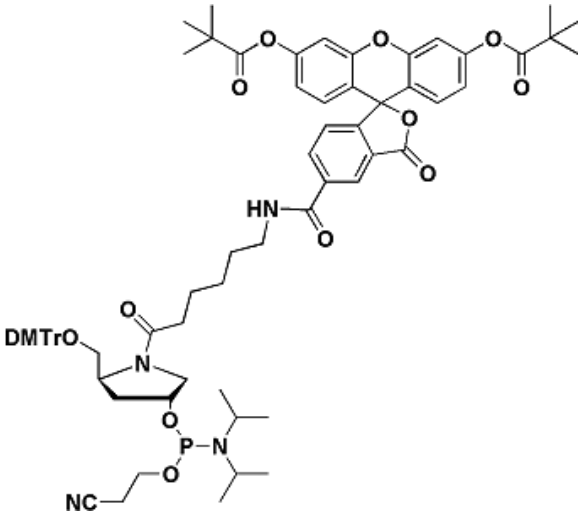
Diluent: Anhydrous Acetonitrile

Coupling: 10 minute coupling time recommended

Deprotection: No changes needed from standard method recommended by synthesizer manufacturer.

Storage: Freezer storage, -10 to -30°C, dry.

Stability in Solution: 7-10 days, <90% efficient after 14 days



Store labeled oligo in the dark, either dry or in a neutral aqueous media at -20°C. Do not store crude fluorescently labeled oligonucleotides in ammonia.

FAM Phosphoramidites and CPG

Fluorescein phosphoramidite (II)

(2S,4R)-N-(6-(3',6'-dipivaloylfluoresceinyl-6-carboxamido)hexanoylamido)-4-O-[(2-cyanoethyl)-(N,N-diisopropyl)-phosphoramidite]-2-(dimethoxytrityloxymethyl)pyrrolidine

Catalogue number: 303-44

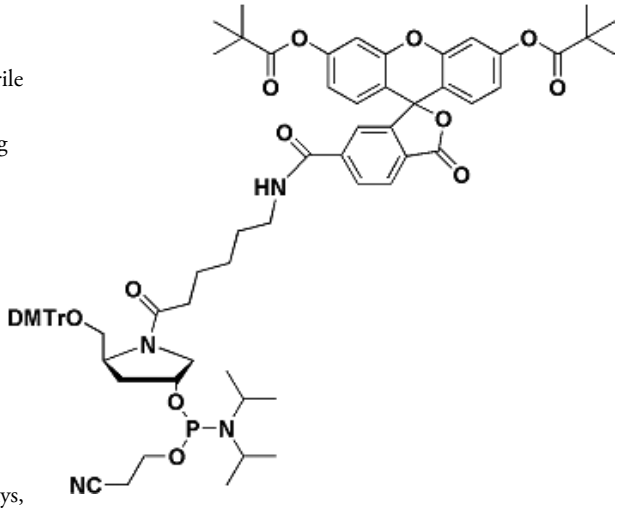
Diluent: Anhydrous Acetonitrile

Coupling: 10 minute coupling time recommended

Deprotection: No changes needed from standard method recommended by synthesizer manufacturer.

Storage: Freezer storage, -10 to -30°C, dry.

Stability in Solution: 7-10 days, <90% efficient after 14 days

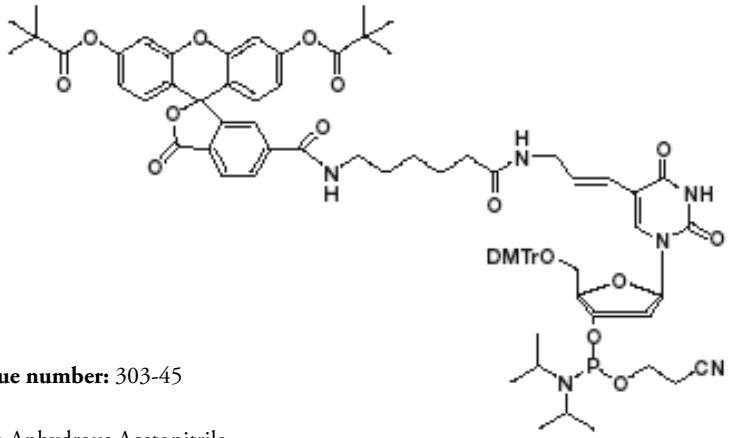


Store labeled oligo in the dark, either dry or in a neutral aqueous media at -20°C. Do not store crude fluorescently labeled oligonucleotides in ammonia.

FAM Phosphoramidites and CPG

6-Fluorescein dT phosphoramidite

5'-Dimethoxytrityl-5-[3-(6-(fluoresceinyl-6-carboxamido)hexanoylamido)-propenyl] uridine, 3'- (2-cyanoethyl)-(N,N-diisopropyl)-phosphoramidite



Catalogue number: 303-45

Diluent: Anhydrous Acetonitrile

Coupling: 10 minute coupling time recommended

Deprotection: No changes needed from standard method recommended by synthesizer manufacturer.

Storage: Freezer storage, -10 to -30°C, dry.

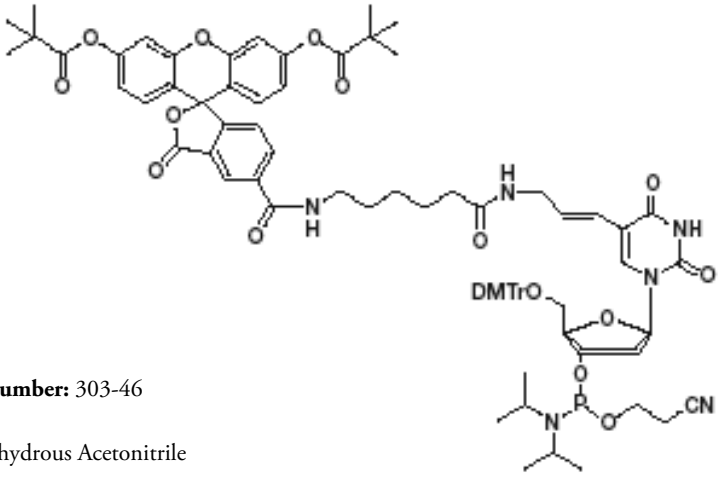
Stability in Solution: 7-10 days, <90% efficient after 14 days

Store labeled oligo in the dark, either dry or in a neutral aqueous media at -20°C. Do not store crude fluorescently labeled oligonucleotides in ammonia.

FAM Phosphoramidites and CPG

5-Fluorescein dT phosphoramidite

5'-Dimethoxytrityl-5-[3-(6-(fluoresceinyl-5-carboxamido)hexanoylamido)-propenyl] uridine-3'-(2-cyanoethyl)-(N,N-diisopropyl)-phosphoramidite



Catalogue number: 303-46

Diluent: Anhydrous Acetonitrile

Coupling: 10 minute coupling time recommended

Deprotection: No changes needed from standard method recommended by synthesizer manufacturer.

Storage: Freezer storage, -10 to -30°C, dry.

Stability in Solution: 7-10 days, <90% efficient after 14 days

Store labeled oligo in the dark, either dry or in a neutral aqueous media at -20°C. Do not store crude fluorescently labeled oligonucleotides in ammonia.

FAM Phosphoramidites and CPG

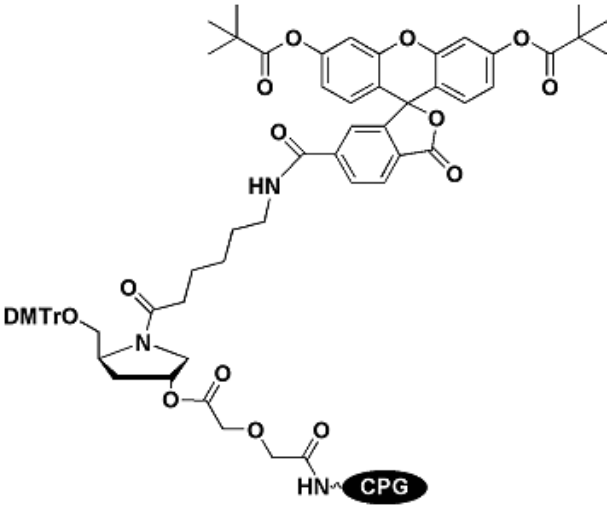
3'-(6-Fluorescein)-CPG

(2S,4R)-N-(6-(3',6'-dipivaloylfluoresceinyl-6-carboxamido)hexanoylamido)-4-O-(diglycoyl-long chain alkylamino-CPG)-2-(dimethoxytrityloxymethyl)pyrrolidine

Catalogue number: 303-47

Diluent: Not Applicable

Coupling: This support should be used in a manner identical to normal protected nucleoside support since it contains the DMT group.



Deprotection: No changes needed from standard method recommended by synthesizer manufacturer.

Storage: Freezer storage, -10 to -30°C, dry.

Stability in Solution: Not Applicable

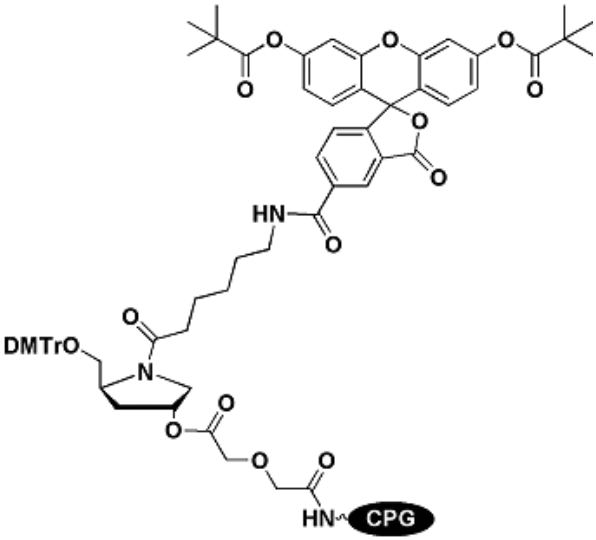
Store labeled oligo in the dark, either dry or in a neutral aqueous media at -20°C. Do not store crude fluorescently labeled oligonucleotides in ammonia.

FAM Phosphoramidites and CPG

3'-(5-Fluorescein)-CPG

(2S,4R)-N-(6-(3',6'-dipivaloylfluoresceinyl-5-carboxamido)hexanoylamido)-4-O-(diglycoyl-long chain alkylamino-CPG)-2-(dimethoxytrityloxymethyl)pyrrolidine

1-Dimethoxytrityloxy-3-aza-3-[1-oxo-3-{(di-O-pivaloyl-fluorescein)-5-carboxamido} propyl]heptyl-6-Odiglycoyl- long chain alkylamino-CPG



Catalogue number: 303-48

Diluent: Not Applicable

Coupling: This support should be used in a manner identical to normal protected nucleoside support since it contains the DMT group.

Deprotection: No changes needed from standard method recommended by synthesizer manufacturer.

Storage: Freezer storage, -10 to -30°C, dry.

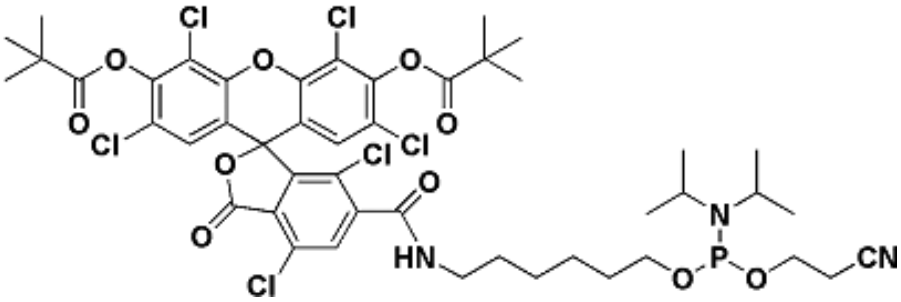
Stability in Solution: Not Applicable

Store labeled oligo in the dark, either dry or in a neutral aqueous media at -20°C. Do not store crude fluorescently labeled oligonucleotides in ammonia.

HEX Phosphoramidites and CPG

HEX phosphoramidite

[(4,7,2',4',5',7'-hexachloro-3',6'-dipivaloylfluoresceinyl)-6-carboxamidohexyl]-1-O-(2-cyanoethyl)-(N,N-diisopropyl)-phosphoramidite



Catalogue number: 303-51

Diluent: Anhydrous Acetonitrile

Coupling: 3 minute coupling time recommended

Deprotection: Ammonium Hydroxide for 24 hrs at room temperature.

Storage: Freezer storage, -10 to -30°C, dry.

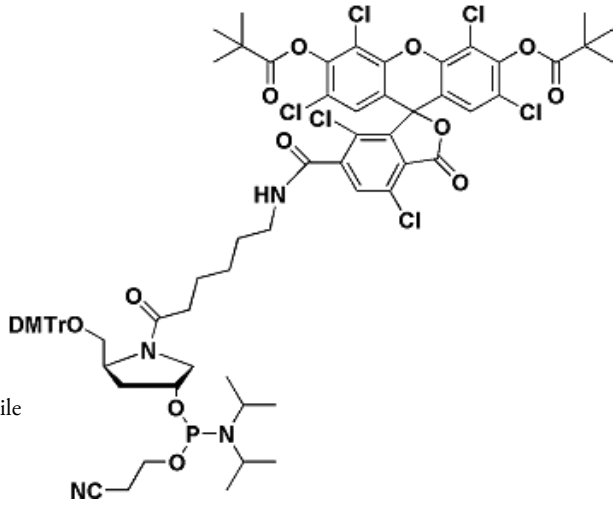
Stability in Solution: 2-3 days, <90% efficient after 4 days

Store labeled oligo in the dark, either dry or in a neutral aqueous media at -20°C.
Do not store crude fluorescently labeled oligonucleotides in ammonia.

HEX Phosphoramidites and CPG

Internal HEX phosphoramidite

(2S,4R)-N-(4,7,2',4',5',7'-hexachloro-6-(3',6'-dipivaloylfluoresceinyl-6-carboxamido)hexanoylamido)-4-O-[(2-cyanoethyl)-(N,N-diisopropyl)-phosphoramidite]-2-(dimethoxytrityloxymethyl)pyrrolidine



Catalogue number: 303-52

Diluent: Anhydrous Acetonitrile

Coupling: 3 minute coupling time recommended

Deprotection: Ammonium Hydroxide for 24 hrs at room temperature.

Storage: Freezer storage, -10 to -30°C, dry.

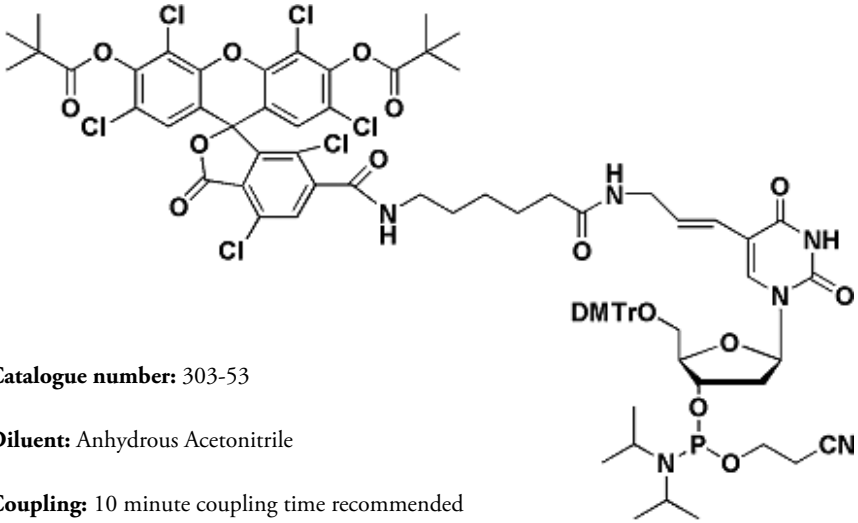
Stability in Solution: 2-3 days, <90% efficient after 4 days

Store labeled oligo in the dark, either dry or in a neutral aqueous media at -20°C. Do not store crude fluorescently labeled oligonucleotides in ammonia.

HEX Phosphoramidites and CPG

HEX-dT phosphoramidite

5'-Dimethoxytrityl-5-[3-(6-(4,7,2',4',5',7'-hexachloro-3',6'-dipivaloylfluoresceinyl-6-carboxamido)-hexanoylamido)-propenyl]uridine, 3'-(2-cyanoethyl)-(N,N-diisopropyl)-phosphoramidite



Catalogue number: 303-53

Diluent: Anhydrous Acetonitrile

Coupling: 10 minute coupling time recommended

Deprotection: Ammonium Hydroxide for 24 hrs at room temperature.

Storage: Freezer storage, -10 to -30°C, dry.

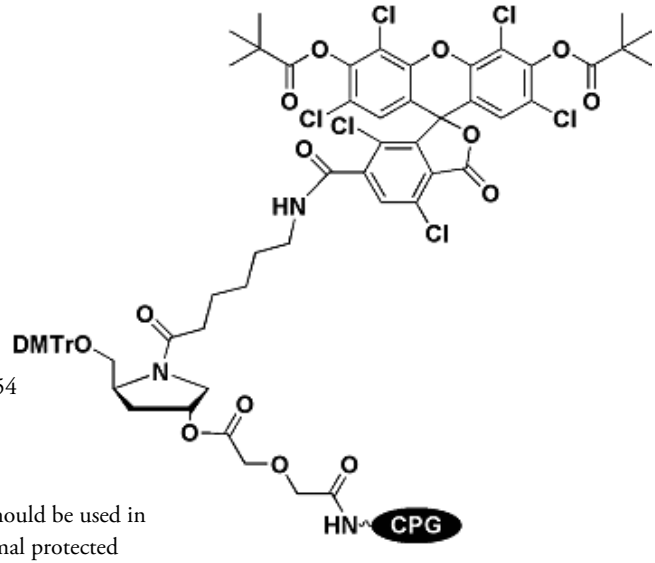
Stability in Solution: 7-10 days, <90% efficient after 14 days

Store labeled oligo in the dark, either dry or in a neutral aqueous media at -20°C.
Do not store crude fluorescently labeled oligonucleotides in ammonia.

HEX Phosphoramidites and CPG

3'-HEX-CPG

(2S,4R)-N-(6-(4,7,2',4',5',7'-hexachloro-3',6'-dipivaloylfluoresceinyl-6-carboxamido)-hexanoylamido)-4-O-(diglycoyl-long chain alkylamino-CPG)-2-(dimethoxytrityloxymethyl)-pyrrolidine



Catalogue number: 303-54

Diluent: Not Applicable

Coupling: This support should be used in a manner identical to normal protected nucleoside support since it contains the DMT group.

Deprotection: Ammonium Hydroxide for 24 hrs at room temperature.

Storage: Freezer storage, -10 to -30°C, dry.

Stability in Solution: Not Applicable

Store labeled oligo in the dark, either dry or in a neutral aqueous media at -20°C. Do not store crude fluorescently labeled oligonucleotides in ammonia.

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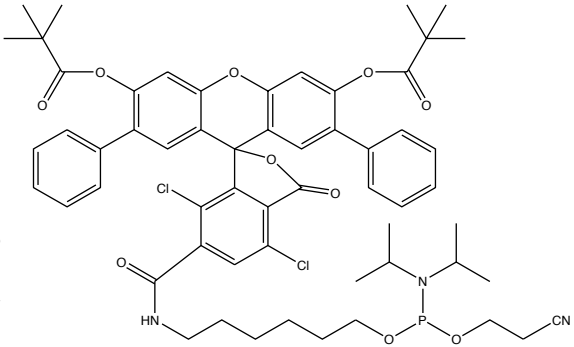
SIMA (HEX analogue) Phosphoramidite

SIMA phosphoramidite

[(3',6'-dipivaloyl-2',7'-diphenyl-4,7-dichlorofluoresceinyl)-6-carboxamidohexyl]-1-O-(2-cyanoethyl)-(N,N-diisopropyl)-phosphoramidite

Catalog Number: 303-55



SIMA is a full spectral analog of HEX in all fluorescent applications, but has significantly improved stability. It has a higher quantum yield and molecular extinction than HEX. SIMA is also more versatile in oligo synthesis especially due to improved stability during deprotection and simple purification of labeled oligos

Formula: $C_{58}H_{64}Cl_2N_3O_{10}P$
M.W.: 1065.0

Diluent: Anhydrous Acetonitrile

Coupling: No changes needed from standard method recommended by synthesizer manufacturer.

Deprotection: No changes needed from standard method recommended by synthesizer manufacturer. SIMA labeled oligos are stable at 55°C in ammonium hydroxide (up to 6-8 hours) and can be deprotected with AMA.

Storage: Freezer storage, -10 to -30°C, dry.

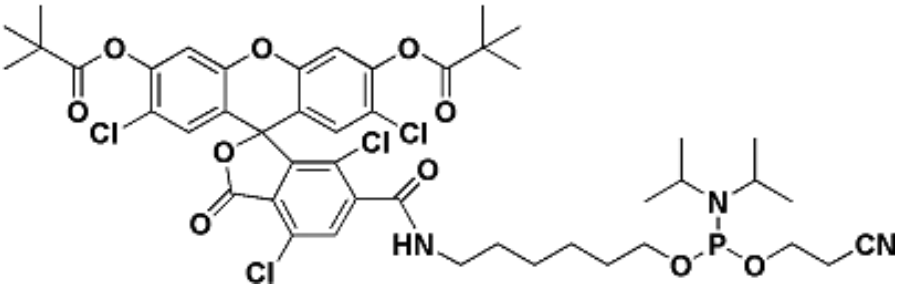
Stability in Solution: 2-3 days, <90% efficient after 4 days

Store labeled oligo in the dark, either dry or in a neutral aqueous media at -20°C.
Do not store crude fluorescently labeled oligonucleotides in ammonia.

TET Phosphoramidites and CPG

TET phosphoramidite

[(4,7,2',7'-tetrachloro-3',6'-dipivaloylfluoresceinyl)-6-carboxamidohexyl]-1-O-(2-cyanoethyl)-(N,N-diisopropyl)-phosphoramidite



Catalogue number: 303-61

Diluent: Anhydrous Acetonitrile

Coupling: 3 minute coupling time recommended

Deprotection: Ammonium Hydroxide for 24 hrs at room temperature.

Storage: Freezer storage, -10 to -30°C, dry.

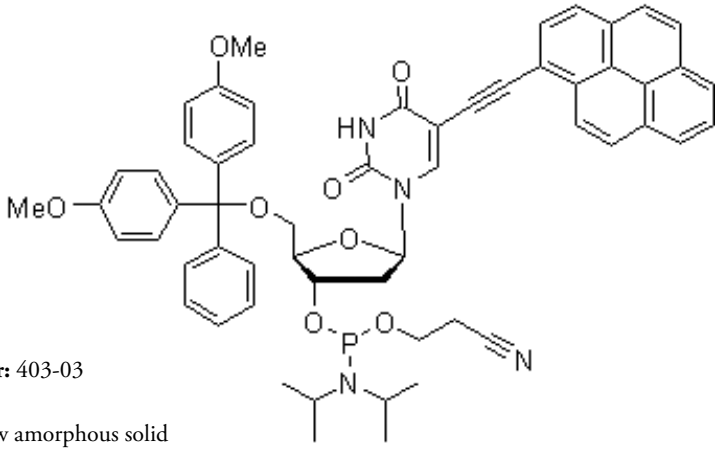
Stability in Solution: 2-3 days, <90% efficient after 4 days

Store labeled oligo in the dark, either dry or in a neutral aqueous media at -20°C.
Do not store crude fluorescently labeled oligonucleotides in ammonia.

Modifying nucleosides

Pyrene Derivative

3'-O-(diisopropylamino-2-cyanethoxyphosphinyl)-5'-O-(4,4'-dimethoxytrityl)-5-(pyren-1-ylethynyl)-2'-deoxyuridine



Catalogue number: 403-03

Appearance: Yellow amorphous solid

Diluent: Mixture CH3CN - CH2Cl2 (1:1), v/v

Coupling: 5 minute coupling time recommended

Storage: Freezer storage, -10 to -30°C, dry.

Stability: 3-4 days, <90% efficient after 5 days

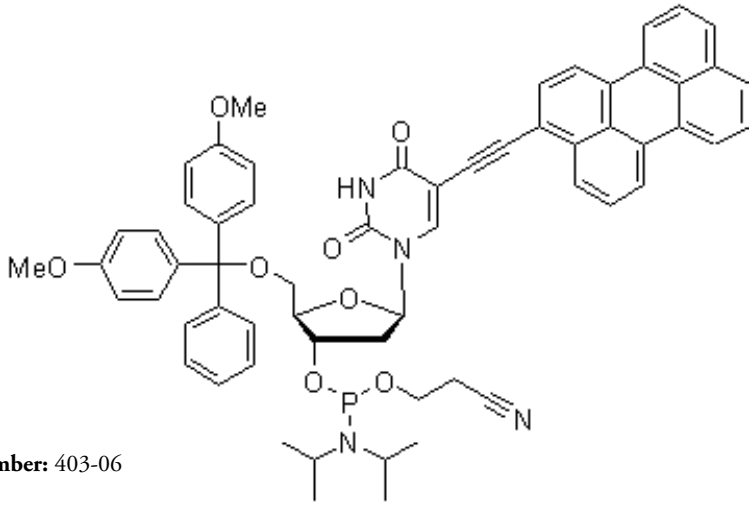
Store labeled oligo in the dark.

5-(Pyren-1-ylethynyl)-2'-deoxyuridine contains pyrene chromophore conjugated with nucleobase through the triple bond. Its fluorescent properties are different from those of non-conjugated pyrene thus making this nucleoside suitable for hybridization studies including FRET, mismatch detection, electron injection studies, and other applications.

Modifying nucleosides

Pyrelene Derivative

3'-O-(N,N-diisopropylamino-2-cyanethoxyphosphinyl)-5'-O-(4,4'-dimethoxytrityl)-5-(perylen-3-ylethynyl)-2'-deoxyuridine



Catalogue number: 403-06

Appearance: Orange amorphous solid

Diluent: Mixture CH3CN - CH2Cl2 (1:1), v/v

Coupling: 5 minute coupling time recommended

Storage: Freezer storage, -10 to -30°C, dry.

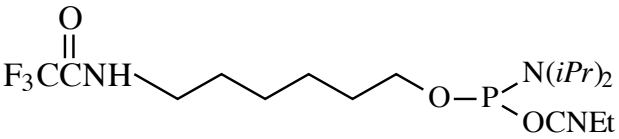
Stability: 3-4 days, <90% efficient after 5 days

Store labeled oligo in the dark.

5-(Perylen-3-ylethynyl)-2'-deoxyuridine contains perylene conjugated to uracil. Emission wavelength maximum is 490 nm. In DNA probes this compound shows increase in fluorescence intensity.

Aminolinker Phosphoramidites

C6 TFA Aminolinker Phosphoramidite



Catalogue number: 501-01

Purity: > 90%

Formula: $C_{17}H_{31}F_3N_3O_3P$

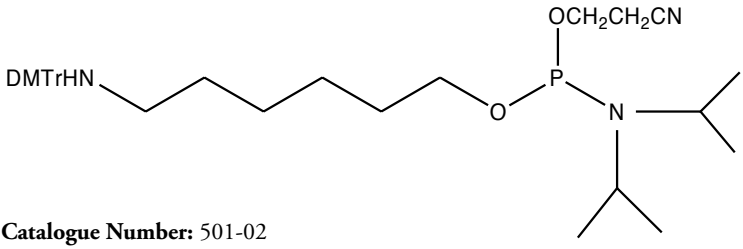
Dilution (for 0.1M): 0.25g/6.0 ml
1.0g/24.0 ml

Description: Colorless to light yellow oil

Storage: Frozen, -10 to -20°C

Aminolinker Phosphoramidites

DMT C6-Aminolinker Phosphoramidite



Catalogue Number: 501-02

Purity: > 90%

Formula: $C_{36}H_{50}N_3O_4P$

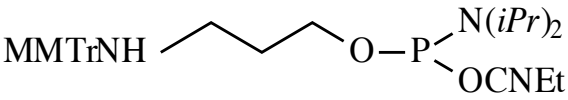
Dilution (for 0.1M): 0.25g/4.03 ml
1.0g/16.1 ml

Description: Colorless to light yellow oil

Storage: -20°C

Aminolinker Phosphoramidites

C3 MMTr-Aminolinker Phosphoramidite



Catalogue Number: 501-03

Purity: > 95%

Formula: $C_{32}H_{42}N_3O_3P$

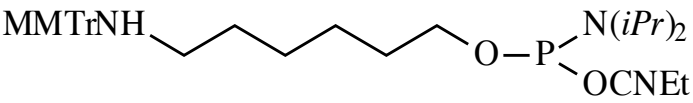
Dilution (for 0.1M): 0.25g/4.56 ml
1.0g/18.2 ml

Description: Colorless to light yellow oil

Storage: Refrigerated, 2-8°C

Aminolinker Phosphoramidites

C6 MMTr-Aminolinker Phosphoramidite



Catalogue number: 501-04

Purity: > 90%

Formula: $C_{35}H_{48}N_3O_3P$

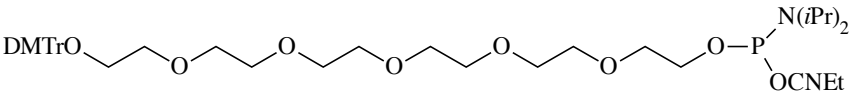
Dilution (for 0.1M): 0.25g/4.2 ml
1.0g/17 ml

Description: Colorless to light yellow oil

Storage: Refrigerated, 2-8°C

Spacer Phosphoramidites

Spacer 18 Phosphoramidite



Catalogue number: 501-05

Purity: > 90%

Formula: $C_{42}H_{61}N_2O_{10}P$

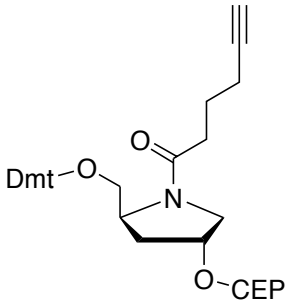
Dilution (for 0.1M): 0.25g/3.2 ml
1.0g/12.7 ml

Description: Colorless to light yellow oil

Storage: Frozen -10 to -20°C

Acetylenic Amidites

Reagent I-amidite



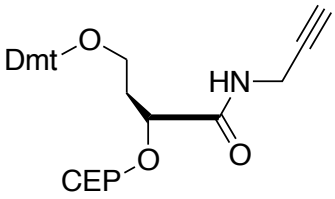
Catalogue number: 501-06

Purity: > 95%

A hydroxyprolinol-derived reagent (enantiomerically pure). Suitable for 5' and internal labeling. Stable to all ONS steps and ammonolysis. Oligonucleotides synthesized undergo smooth conjugation to azides in the presence of copper(I) species.

Acetylenic Amidites

Reagent 2-amidite



Catalogue number: 501-07

Purity: > 95%

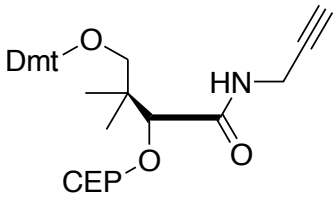
A 2,4-dihydroxybutyramide-derived reagent, enantiomerically pure. Suitable for 5' and internal labeling. Stable to all ONS steps. When on 5', stable to ammonolysis with DMT-on. Oligonucleotides synthesized undergo smooth conjugation to azides in the presence of copper(I) species. When the label is 5'-terminal, oligonucleotide should be subjected to ammonolysis only in DMT-on mode.

References:

1. Dioubankova, N.N.; Malakhov, A.D.; Stetsenko, D.A.; Gait, M.J.; Korshun, V.A. Phosphoramidites and solid supports based on N-substituted 2,4-dihydroxybutyramides: universal reagents for synthesis of modified oligonucleotides. Tetrahedron, **2006,** 62, 6762–6773.
2. Ustinov, A.V.; Dubnyakova, V.V.; Korshun, V.A. Perylene Diimide-Oligonucleotide Conjugates Constructed by Click Chemistry. Nucleosides Nucleotides & Nucleic Acids, **2007,** 26, 751–754.
3. Ustinov, A.V.; Dubnyakova, V.V.; Korshun, V.A. A convenient "click chemistry" approach to perylene diimide–oligonucleotide conjugates. Tetrahedron, **2008,** in press.

Acetylenic Amidites

Reagent 3-amidite



Catalogue Number: 501-08

Purity: > 95%

A 3,3-dimethyl-2,4-dihydroxybutyramide-derived reagent, enantiomerically pure. Suitable for 5' and internal labeling. Stable to all ONS steps. When on 5', stable to ammonolysis with DMT-on. When the label is 5'-terminal, oligonucleotide should be subjected to ammonolysis only in DMT-on mode.

References:

1. Dioubankova, N.N.; Malakhov, A.D.; Stetsenko, D.A.; Gait, M.J.; Korshun, V.A. Phosphoramidites and solid supports based on N-substituted 2,4-dihydroxybutyramides: universal reagents for synthesis of modified oligonucleotides. Tetrahedron, **2006,** 62, 6762–6773.

Prices

Cat.#	Name	Page	Unit	Price, EUR	Price, USD*
Reagents for RNA and DNA synthesis					
103-00	Universal Solid Support III	3		request	request
103-10	Chemical Phosphorylation Reagent II	4		request	request
103-20	Trimer (Codon) Phosphoramidities	5		request	request
103-21	Dimer Phosphoramidities	7		request	request
2' – Fluoro- 2'- deoxynucleosides & derivatives					
203-15	2'-Fluoro-2'-Deoxyguanosine	8	250 mg	100	160
			1 g	225	360
			10 g	1500	2400
203-17	2'-Fluoro-2'-Deoxyadenosine	9	250 mg	90	145
			1 g	210	340
			10 g	1400	2240
203-50	2'-Fluoro-2'-Deoxyguanosine-3'-CE-phosphoramidite	10	250 mg	150	240
			1 g	350	560
			10 g	2100	3360
203-51	2'-Fluoro-2'-Deoxyadenosine-3'-CE-phosphoramidite	11	250 mg	140	225
			1 g	330	530
			10 g	2000	3200
203-52	2'-Fluoro-2'-Deoxyuridine-3'-CE-phosphoramidite	12	250 mg	45	70
			1 g	90	145
			10 g	650	1040
203-53	2'-Fluoro-2'-Deoxycytidine-3'-CE-phosphoramidite	13	250 mg	45	70
			1 g	90	145
			10 g	650	1040
104-01	2'-Fluoro-2'-deoxyadenosine-5'-Triphosphate	14	request	request	
104-02	2'-Fluoro-2'-deoxycytidine-5'-Triphosphate	14	request	request	
104-03	2'-Fluoro-2'-deoxyguanosine-5'-Triphosphate	14	request	request	
104-04	2'-Fluoro-2'-deoxyuridine-5'-Triphosphate	14	request	request	
104-05	2'-Fluoro-2'-deoxynucleoside-5'-Triphosphate Kit,	14	request	request	

Prices

Cat.#	Name	Page	Unit	Price, EUR	Price, USD*
3'-Amino-2',3'-Dideoxynucleosides					
203-11	3'- Amino-2',3'-dideoxyadenosine	15	250 mg 1 g 10 g	40 90 600	65 140 960
203-10	3'- Amino-2',3'-dideoxyguanosine	16	250 mg 1 g 10 g	50 120 800	80 190 1280
203-30	3'- Amino-2',3'-dideoxy-2-fluoroadenosine	17	250 mg 1 g 10 g	114,75 270 1800	185 430 2880
203-12	3'-Amino-2',3'-dideoxy-2,6-diaminopurineriboside	18	250 mg 1 g 10 g	44,63 105 700	75 170 1120
Purine Nucleosides					
203-27	2'-Amino-2'-deoxyadenosine	19	250 mg 1 g 10 g	150 345 2300	240 550 3600
203-31	2'-Amino-2'-deoxy-2-fluoroadenosine	20	250 mg 1 g 10 g	220 525 3500	350 850 5600
203-28	2'-Amino-2'-deoxy-2,6-diaminopurineriboside	21	250 mg 1 g 10 g	130 300 2000	200 480 3200
203-29	2'-Amino-2'-deoxyguanosine	22	250 mg 1 g 10 g	160 375 2500	250 600 4000
203-41	2'-Amino-2'-deoxyinosine	23	250 mg 1 g 10 g	130 300 2000	200 480 3200

Prices

Cat. #	Name	Page	Unit	Price, EUR	Price, USD*
203-05	Arabinofuranosyl-adenine	24	250 mg 1 g 10 g	20 45 300	35 75 480
203-20	Arabinofuranosyl-6-Benzylaminopurine	25	250 mg 1 g 10 g	85 195 1300	140 320 2080
203-06	Arabinofuranosyl-2,6- diaminopurine	26	250 mg 1 g 10 g	20 45 300	35 75 480
203-32	Arabinofuranosyl-2-fluoroadenine	27	250 mg 1 g 10 g	100 225 1500	160 360 2400
203-03	Arabinofuranosyl-guanine	28	250 mg 1 g 10 g	35 75 500	60 120 800
203-37	Arabinofuranosyl-isoguanine	29	250 mg 1 g 10 g	290 675 4500	470 1080 7200
203-21	6-Benzylaminopurine 2'-deoxyriboside	30	250 mg 1 g 10 g	85 195 1300	140 320 2080
203-25	2-Chloro-2'-deoxyadenosine	31	250 mg 1 g 10 g	80 220 1500	130 350 2400
203-35	2'-deoxy-2-fluoroadenosine	32	250 mg 1 g 10 g	85 195 1300	140 320 2080
203-36	2'-deoxy-2'-fluoro-2-fluoroadenosine	33	250 mg 1 g 10 g	290 675 4500	470 1080 7200

Prices

Cat.#	Name	Page	Unit	Price, EUR	Price, USD*
203-18	2'-Deoxy-2'-fluoro-2,6-diaminopurineriboside	34	250 mg 1 g 10 g	100 240 1600	160 390 2560
203-14	2'-Deoxy-2'-fluoroinosine	35	250 mg 1 g 10 g	85 195 1300	140 320 2080
203-38	2'-Deoxyisoguanosine	36	250 mg 1 g 10 g	130 300 2000	210 480 3200
203-40	2'-Deoxy-2'-fluoroisoguanosine	37	250 mg 1 g 10 g	290 675 4500	470 1080 7200
203-23	2,6-Diaminopurine 2'-deoxyriboside	38	250 mg 1 g 10 g	35 75 500	60 120 800
203-39	Isoguanosine	39	250 mg 1 g 10 g	170 390 2600	270 630 4200
Labeled 2'-Deoxyuridine 5'-Triphosphates					
303-11	Biotin-11-dUTP	40	1 µMol 10 µMol 100 µMol	550 2750 11000	880 4400 17000
303-12	6-FAM-11-dUTP	41	1 µMol 10 µMol 100 µMol	550 2750 11000	880 4400 17000
303-13	Biotin-16-dUTP	42	1 µMol 10 µMol 100 µMol	550 2750 11000	880 4400 17000

Prices

Cat.#	Name	Page	Unit	Price, EUR	Price, USD*
Labeled 2'-Deoxycytidine 5'-Triphosphates					
303-21	Biotin-11-dCTP	43	1 µMol 10 µMol 100 µMol	550 2750 11000	880 4400 17000
303-22	6-FAM-11-dCTP	44	1 µMol 10 µMol 100 µMol	550 275 11000	880 440 17000
Labeled uridine 5'-Triphosphates					
303-31	Biotin-11-UTP	45	1 µMol 10 µMol 100 µMol	550 2750 11000	880 4400 17000
303-32	6-FAM-11-UTP	46	1 µMol 10 µMol 100 µMol	550 2750 11000	880 4400 17000
Labeled 2'-Deoxyadenasine 5'-Triphosphates					
303-71	Biotin-11-dATP	47	1 µMol 10 µMol	1700 8500	2600 13100
FAM Phosphoramidites					
303-41	5'-Fluorescein phosphoramidite (6-FAM)	48	250 mg 1 g 10 g	80 290 2900	130 460 4600
303-42	5'-Fluorescein phosphoramidite (5-FAM)	49	250 mg 1 g 10 g	80 290 2900	130 460 4600
303-43	Fluorescein phosphoramidite (I)	50	250 mg 1 g 10 g	120 430 3600	190 680 5700

Prices

Cat.#	Name	Page	Unit	Price, EUR	Price, USD*
303-44	Fluorescein phosphoramidite (II)	51	250 mg 1 g 10 g	120 430 3600	190 680 5700
303-45	6-Fluorescein dT phosphoramidite	52	250 mg 1 g 10 g	190 680 5070	280 1000 8000
303-46	5-Fluorescein dT phosphoramidite	53	250 mg 1 g 10 g	190 680 5070	280 1000 8000
303-47	3'-(6-Fluorescein)-CPG	54	250 mg 1 g 10 g	60 210 1450	85 300 2300
303-48	3'-(5-Fluorescein)-CPG	55	250 mg 1 g 10 g	60 210 1450	85 300 2300
HEX Phosphoramidites					
303-51	HEX phosphoramidite	56	250 mg 1 g 10 g	120 450 4300	195 720 6900
303-52	Internal HEX phosphoramidite	57	250 mg 1 g 10 g	285 1000 6800	460 1600 10800
303-53	HEX-dT phosphoramidite	58	250 mg 1 g 10 g	340 1200 6800	550 1920 10800
303-54	3'-HEX-CPG	59	250 mg 1 g 10 g	140 500 2500	230 800 4000

Prices

Cat.#	Name	Page	Unit	Price, EUR	Price, USD*
SIMA (HEX analogue) Phosphoramidite					
303-55	SIMA phosphoramidite	60	250 mg 1 g 10 g	120 450 4300	195 720 6900
TET Phosphoramidites					
303-64	TET phosphoramidite	61	250 mg 1 g 10 g	120 450 4300	195 720 6900
Modifying nucleosides					
403-03	Pyrene Derivative	62	250 mg 1 g 10 g	200 670 6000	290 1000 9000
403-06	Pyrelene Derivative	63	250 mg 1 g 10 g	280 960 8700	400 1400 13000

Prices

Cat.#	Name	Page	Unit	Price, EUR	Price, USD*
Aminolinker Phosphoramidites					
501-01	C6 TFA Aminolinker Phosphoramidite	64	250 mg	25	40
501-02	DMT C6-Aminolinker Phosphoramidite	65	250 mg	40	65
501-03	C3 MMTr-Aminolinker Phosphoramidite	66	250 mg	55	90
501-04	C6 MMTr-Aminolinker Phosphoramidite	67	250 mg	40	65
Spacer Phosphoramidites					
501-05	Spacer 18 Phosphoramidite	68	250 mg	85	135
Acetylenic Amidites					
501-06	Reagent 1-amidite	69	250 mg	150	240
			1 g	540	860
			10 g	4800	7600
501-07	Reagent 2-amidite	70	250 mg	130	200
			1 g	430	680
			10 g	3900	6200
501-08	Reagent 3-amidite	71	250 mg	100	160
			1 g	360	570
			10 g	2900	4600

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Sales terms

Payment net 30 days, wire transfer, Prices are ex-works Finland.
Prices in Euro are valid through December 31st, 2008.
*Metkinen Chemistry reserves the right to re-quote USD price for any item.
Standard Metkinen Chemistry Oy sales terms apply.

Standard Sales Terms

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ORDERING INFORMATION

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