



Nucleic Acid Products for PCR and Sequencing

Product Catalog





ABOUT SYNTHGENE

Synthgene Biotechnology Co., Ltd. provides materials and services to support mRNA and oligonucleotide manufacturing. Founded in 2018 by a group of passionate nucleic acid chemists, the goal of the company is to debottleneck the raw material supply and develop innovative solutions to support customers in the industry. The company has a robust quality system and ISO9001 certification to support cGMP manufacturing of mRNA raw materials that include NTPs, modified NTPs and cap analogs. For the GMP raw materials, Drug Master Files have been filed with FDA. In addition, Synthgene offers analytical development service and mRNA-related impurity standards and detection kits, LNP screening service, IVT process development and IVT kits for mRNA research. For solid-phase DNA and RNA synthesis, Synthgene offers high quality phosphoramidites to support cGMP oligo manufacturing. With over 200 people in R&D and AI-assisted discovery platform, Synthgene will continue to bring new products to the market.



6

2023.07

Areterna LLC, Synthgene's US subsidiary, was founded in 2023.

5

2022.08

Nominated as a “Unicorn” company by the City of Nanjing.

3

2022.03

Raised over 300 million RMB in Series A+ funding.

1

2021.01

Moved into the new location with more than 20000 m².

4

2022.06

Drug Master Files on selected NTPs and cap analogs were filed with FDA.

2

2021.10

Anhui site was qualified to manufacture GMP raw materials at metric ton scale.

Deoxyribonucleoside triphosphate (dNTP), including dATP, dGTP, dCTP, dTTP, is indispensable as the raw material of PCR reaction in the system. The quality and concentration of dNTP are closely related to the amplification efficiency of PCR reaction.

After a large number of test verifications, Synthgene Biotechnology has launched molecular biological dNTP to guard your every PCR reaction!



Application scenarios

It is suitable for molecular biology applications in multiple scenarios, including qPCR, PCR, long fragment PCR, isothermal amplification, DNA labeling, cloning, Sanger and NGS sequencing, etc.

Standard PCR	Hot-start PCR	Long-range PCR (over 20kb)
Low copy PCR	Real-time PCR	cDNA synthesis/RT-PCR
Pyrosequencing	Microarrays	Fluorescent DNA sequencing
Labelling reactions	Genotyping	Site-directed mutagenesis

Product advantages

The purity of triphosphate is higher than 99% verified by HPLC.

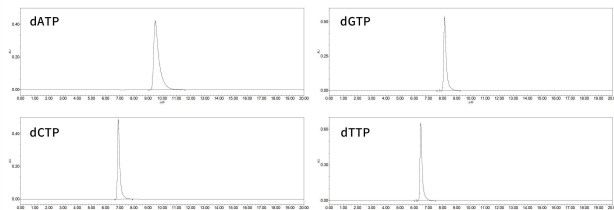


Figure 1: Product purity $\geq 99\%$

No DNase, RNase and Cleavage enzyme residues

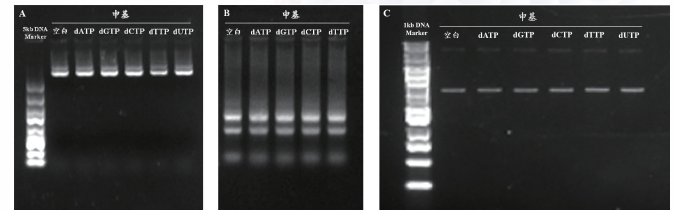


Figure 2A: No DNase residues
2B: No RNase residues
2C: No cleavage enzyme residues

No bacterial and human genome residues, ensuring the specificity of DNA synthesis

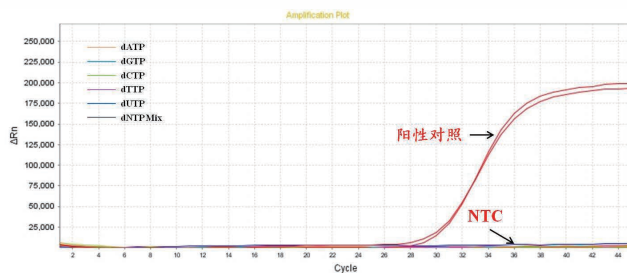


Figure 3: No bacterial genome residues

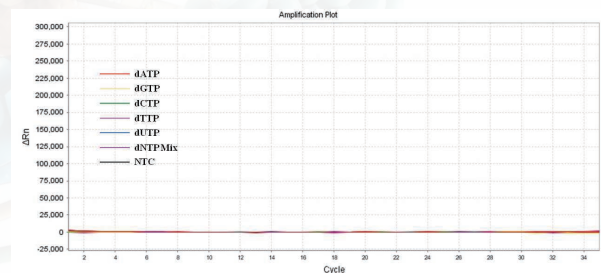


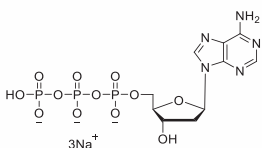
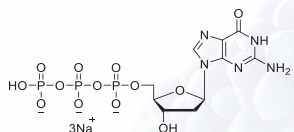
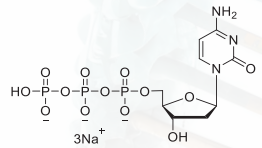
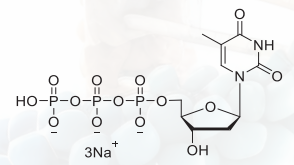
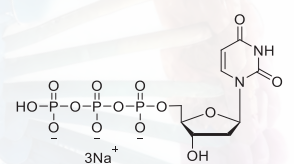
Figure 4: Unmanned genome residues

Product Content

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dNTPs

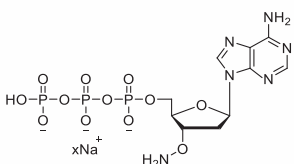
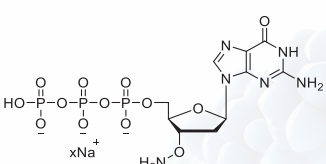
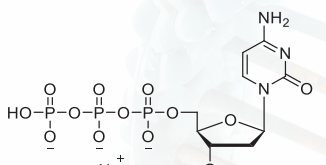
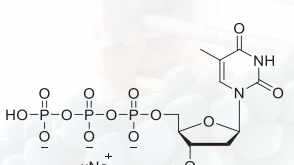
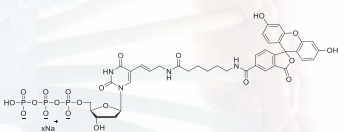
SKU	Product Name	Structure	Purity	Specifications
dNTP001-0.1 dNTP001-1 dNTP001-10 dNTP001-100 dNTP001-1K	dATP 100mM Sodium Solution		>99%	100μL 1mL 10mL 100mL 1L
dNTP002-0.1 dNTP002-1 dNTP002-10 dNTP002-100 dNTP002-1K	dGTP 100mM Sodium Solution		>99%	100μL 1mL 10mL 100mL 1L
dNTP003-0.1 dNTP003-1 dNTP003-10 dNTP003-100 dNTP003-1K	dCTP 100mM Sodium Solution		>99%	100μL 1mL 10mL 100mL 1L
dNTP004-0.1 dNTP004-1 dNTP004-10 dNTP004-100 dNTP004-1K	dTTP 100mM Sodium Solution		>99%	100μL 1mL 10mL 100mL 1L
dNTP005-0.1 dNTP005-1 dNTP005-10 dNTP005-100 dNTP005-1K	dUTP 100mM Sodium Solution		>99%	100μL 1mL 10mL 100mL 1L



SKU	Product Name	Structure	Purity	Specifications
dNTP006-0.1 dNTP006-1 dNTP006-10 dNTP006-100 dNTP006-1K	dNTP Mix (25mM each) Sodium Solution		>99%	100μL 1mL 10mL 100mL 1L
dNTP007-0.1 dNTP007-1 dNTP007-10 dNTP007-100 dNTP007-1K	dNTP Mix (10mM each) Sodium Solution		>99%	100μL 1mL 10mL 100mL 1L
dNTP008-0.1 dNTP008-1 dNTP008-10 dNTP008-100 dNTP008-1K	dNTP Mix (2.5mM each) Sodium Solution		>99%	100μL 1mL 10mL 100mL 1L
dNTP009-0.1 dNTP009-1 dNTP009-5 dNTP009-10	Cy3-dUTP 1mM Sodium Solution		>95%	100μL 1mL 5mL 10mL
dNTP010-0.1 dNTP010-1 dNTP010-5 dNTP010-10	Biotin-11-dUTP 1mM Sodium Solution		>95%	100μL 1mL 5mL 10mL

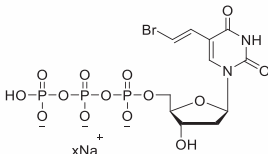
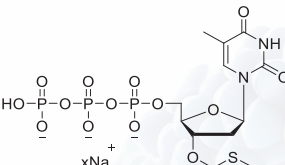
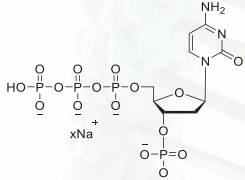
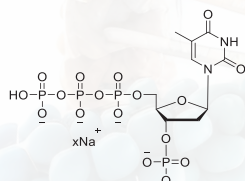
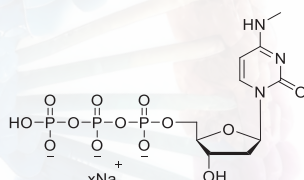


dNTPs

SKU	Product Name	Structure	Purity	Specifications
dNTP011-0.1 dNTP011-1 dNTP011-10 dNTP011-100 dNTP011-1K	3'-ONH₂-dATP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL 1L
dNTP012-0.1 dNTP012-1 dNTP012-10 dNTP012-100 dNTP012-1K	3'-ONH₂-dGTP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL 1L
dNTP013-0.1 dNTP013-1 dNTP013-10 dNTP013-100 dNTP013-1K	3'-ONH₂-dCTP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL 1L
dNTP014-0.1 dNTP014-1 dNTP014-10 dNTP014-100 dNTP014-1K	3'-ONH₂-dTTP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL 1L
dNTP015-0.1 dNTP015-1 dNTP015-5 dNTP015-10	Fluorescein-12-dUTP 1mM Sodium Solution		>95%	100μL 1mL 5mL 10mL

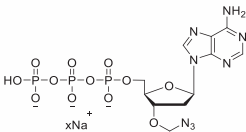
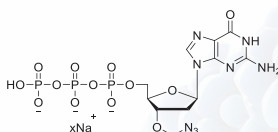
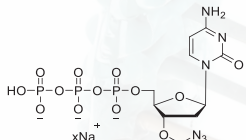
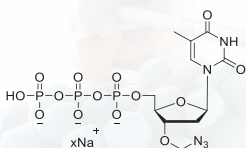
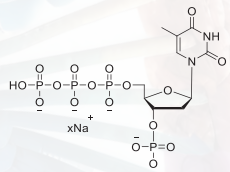


dNTPs

SKU	Product Name	Structure	Purity	Specifications
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dNTP017-0.1 dNTP017-1 dNTP017-10 dNTP017-100 dNTP017-1K	3'-O-methylthiomethyl-dTTP 100mM Sodium Solution		>95%	100μL 1mL 10mL 100mL 1L
dNTP018-0.1 dNTP018-1 dNTP018-10 dNTP018-100	3'-P-dCTP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
dNTP019-0.1 dNTP019-1 dNTP019-10 dNTP019-100	3'-P-dTTP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
dNTP022-0.1 dNTP022-1 dNTP022-10 dNTP022-100	N4-Me-dCTP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL

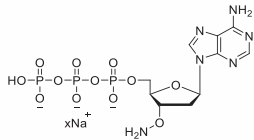
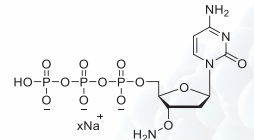
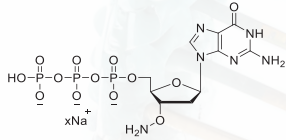
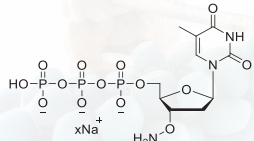
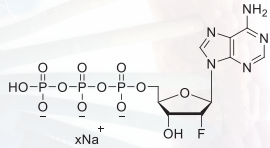


dNTPs

SKU	Product Name	Structure	Purity	Specifications
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dNTP024-0.1 dNTP024-1 dNTP024-10 dNTP024-100	3'-O-Azidomethyl-dGTP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
dNTP025-0.1 dNTP025-1 dNTP025-10 dNTP025-100	3'-O-Azidomethyl-dCTP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
dNTP026-0.1 dNTP026-1 dNTP026-10 dNTP026-100	3'-O-Azidomethyl-dTTP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
dNTP027-0.1 dNTP027-1 dNTP027-10 dNTP027-100	3'-P-dTTP 10mM Sodium Solution		>98%	100μL 1mL 10mL 100mL

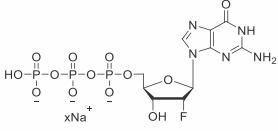
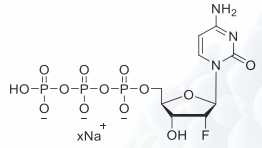
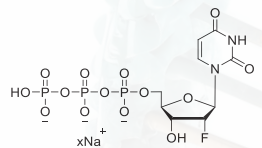
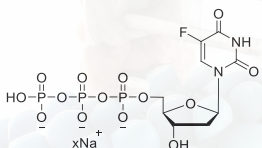
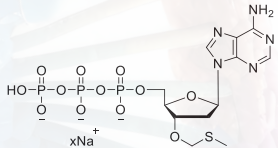


dNTPs

SKU	Product Name	Structure	Purity	Specifications
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dNTP033-0.1 dNTP033-1 dNTP033-10 dNTP033-100	3'-ONH₂-dCTP Sodium Salt		>95%	100mg 1g 10g 100g
dNTP034-0.1 dNTP034-1 dNTP034-10 dNTP034-100	3'-ONH₂-dGTP Sodium Salt		>95%	100mg 1g 10g 100g
dNTP035-0.1 dNTP035-1 dNTP035-10 dNTP035-100	3'-ONH₂-dTTP Sodium Salt		>95%	100mg 1g 10g 100g
dNTP036-0.1 dNTP036-1 dNTP036-10 dNTP036-100	2'-F-dATP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL

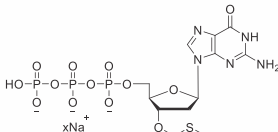
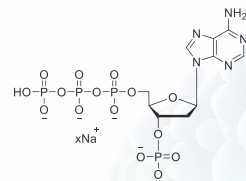
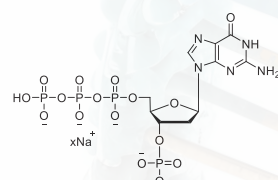
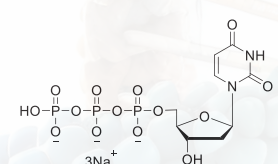
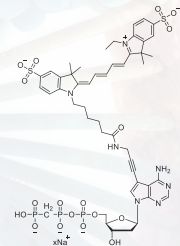


dNTPs

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dNTP039-0.1 dNTP039-1 dNTP039-10 dNTP039-100	2'-F-dUTP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
dNTP041-0.1 dNTP041-1 dNTP041-10 dNTP041-100	5-F-dUTP Sodium Salt		>95%	100mg 1g 10g 100g
dNTP049-0.1 dNTP049-1 dNTP049-10 dNTP049-100	3'-O-methylthiomethyl-dATP 100mM Sodium Solution		>95%	100μL 1mL 10mL 100mL

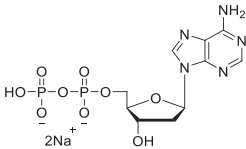
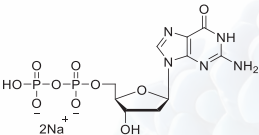
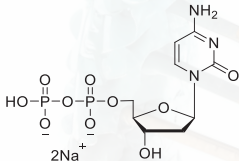
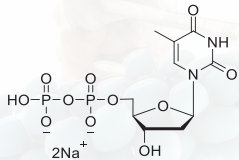
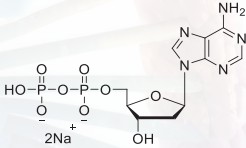


dNTPs

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dNTP051-0.1 dNTP051-1 dNTP051-10 dNTP051-100	3'-P-dATP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
dNTP052-0.1 dNTP052-1 dNTP052-10 dNTP052-100	3'-P-dGTP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
dNTP053-0.1 dNTP053-1 dNTP053-10 dNTP053-100	dUTP 25mM Sodium Solution		>99%	100μL 1mL 10mL 100mL
dNTP054-0.01 dNTP054-0.1 dNTP054-0.5	Cy5-7-Deaza-dATP (β,γ-C) Sodium Salt		>95%	10mg 100mg 500mg



dNMPs & dNDPs

SKU	Product Name	Structure	Purity	Specifications
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dNDP002-0.1 dNDP002-1 dNDP002-10 dNDP002-100	dGDP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
dNDP003-0.1 dNDP003-1 dNDP003-10 dNDP003-100	dCDP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
dNDP004-0.1 dNDP004-1 dNDP004-10 dNDP004-100	dTDP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
dNDP005-0.1 dNDP005-1 dNDP005-10 dNDP005-100 dNDP005-1K	dADP Disodium Salt		>97%	100mg 1g 10g 100g 1kg



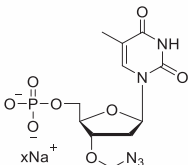
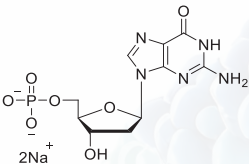
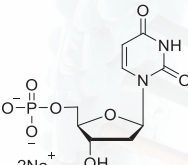
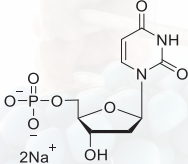
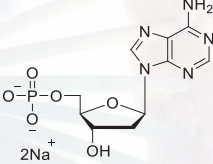
dNMPs & dNDPs

SKU	Product Name	Structure	Purity	Specifications
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dNDP007-0.1 dNDP007-1 dNDP007-10 dNDP007-100 dNDP007-1K	dCDP Disodium Salt		>97%	100mg 1g 10g 100g 1kg
dNDP008-0.1 dNDP008-1 dNDP008-10 dNDP008-100 dNDP008-1K	dTDP Disodium Salt		>97%	100mg 1g 10g 100g 1kg
dNMP001-0.1 dNMP001-1 dNMP001-10 dNMP001-100	dAMP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
dNMP002-0.1 dNMP002-1 dNMP002-10 dNMP002-100	dGMP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL

11

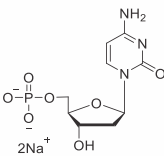
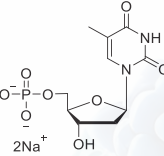


dNMPs & dNDPs

SKU	Product Name	Structure	Purity	Specifications
dNMP008-0.1 dNMP008-1 dNMP008-10 dNMP008-100	3'-O-azidomethyl- dTMP Sodium Salt		>98%	100mg 1g 10g 100g
dNMP009-0.1 dNMP009-1 dNMP009-10 dNMP009-100 dNMP009-1K	dGMP Disodium Salt		>98%	100mg 1g 10g 100g 1kg
dNMP010-0.1 dNMP010-1 dNMP010-10 dNMP010-100	dUMP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
dNMP011-0.1 dNMP011-1 dNMP011-10 dNMP011-100 dNMP011-1K	dUMP Disodium Salt		>98%	100mg 1g 10g 100g 1kg
dNMP012-0.1 dNMP012-1 dNMP012-10 dNMP012-100 dNMP012-1K	dAMP Disodium Salt		>98%	100mg 1g 10g 100g 1kg

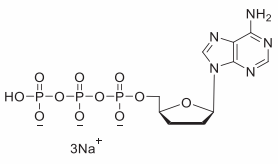
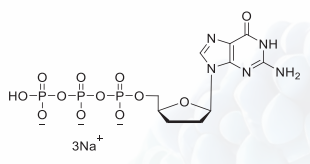
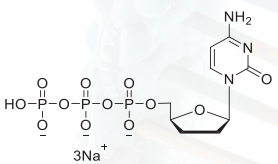
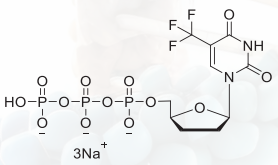
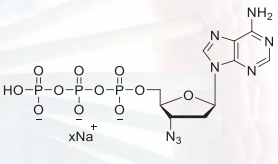


dNMPs & dNDPs

SKU	Product Name	Structure	Purity	Specifications
dNMP013-0.1 dNMP013-1 dNMP013-10 dNMP013-100 dNMP013-1K	dCMP Disodium Salt		>98%	100mg 1g 10g 100g 1kg
dNMP014-0.1 dNMP014-1 dNMP014-10 dNMP014-100 dNMP014-1K	dTMP Disodium Salt		>98%	100mg 1g 10g 100g 1kg

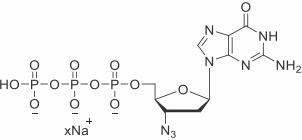
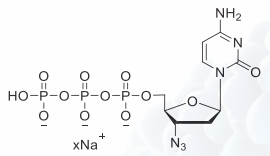
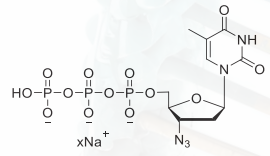
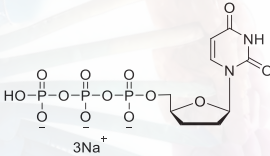


ddNTPs

SKU	Product Name	Structure	Purity	Specifications
ddNTP001-0.1 ddNTP001-1 ddNTP001-10 ddNTP001-100	ddATP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
ddNTP002-0.1 ddNTP002-1 ddNTP002-10 ddNTP002-100	ddGTP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
ddNTP003-0.1 ddNTP003-1 ddNTP003-10 ddNTP003-100	ddCTP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
ddNTP004-0.1 ddNTP004-1 ddNTP004-10 ddNTP004-100	5-CF₃-ddUTP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
ddNTP005-0.1 ddNTP005-1 ddNTP005-10 ddNTP005-100	3'-Azido-ddATP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL

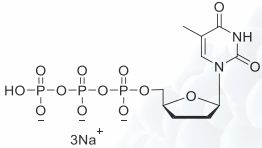


ddNTPs

SKU	Product Name	Structure	Purity	Specifications
ddNTP006-0.1 ddNTP006-1 ddNTP006-10 ddNTP006-100	3'-Azido-ddGTP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
ddNTP007-0.1 ddNTP007-1 ddNTP007-10 ddNTP007-100	3'-Azido-ddCTP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
ddNTP008-0.1 ddNTP008-1 ddNTP008-10 ddNTP008-100	3'-Azido-ddTTP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL
ddNTP009-0.1 ddNTP009-1 ddNTP009-10 ddNTP009-100	AcyNTP-Mix (10 mM each) Sodium Solution		>95%	100μL 1mL 10mL 100mL
ddNTP010-0.1 ddNTP010-1 ddNTP010-10 ddNTP010-100	ddUTP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL



ddNTPs

SKU	Product Name	Structure	Purity	Specifications
ddNTP011-0.1 ddNTP011-1 ddNTP011-10 ddNTP011-100	AcyNTP-Mix (25 mM each) Sodium Solution		>95%	100μL 1mL 10mL 100mL
ddNTP012-0.1 ddNTP012-1 ddNTP012-10 ddNTP012-100	ddTTP 100mM Sodium Solution		>98%	100μL 1mL 10mL 100mL



A series of horizontal dashed lines for writing, contained within a white rectangular box with rounded corners. The box is set against a background featuring a faint, stylized DNA double helix structure composed of pink and blue spheres.

SYNTHGENE



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