

dNTP Set (Lithium salts)

NU-0020-50

Eurogentec products are sold for research or laboratory use only and are not to be administrated to humans or used for medical diagnostics.

Description

A pack of four vials, each containing one of the four nucleotides (dATP, dCTP, dGTP, dTTP).

Package content

Reagent	Reference	Volume	Quantity
dNTP Set 100-110 mM each	NU-0020-50	4 x 250 µL	4x 25 µmol

Shipping conditions

dNTP Set is shipped on dry ice.

Storage

Store the dNTP Set at -20°C or -70°C, in a constant temperature freezer. Avoid multiple freeze/ thaw cycles.

For long-term usage, aliquoting is recommended.

Purity

dNTPs are enzymatically produced from nucleotide monophosphates by a process of phosphorylation. This process uses highly specific enzymatic systems, which eliminate impurities and PCR inhibitors such as modified nucleotides and pyrophosphates. dNTPs are purified with preparative HPLC and are at least 99 % pure.

Typical analysis

Lithium salts, $\geq 99\%$ deoxynucleoside triphosphates (HPLC, area $\geq 99\%$), $\leq 1\%$ deoxynucleoside monophosphates and deoxynucleoside diphosphates.

Quality control

dNTPs are tested for the absence of DNase, RNase, protease and nicking activity. Each batch is validated rigorously for purity by HPLC, and tested for performance in a wide range of PCR templates, including a long-distance 20 kb functional test.

dNTP characteristics

Deoxynucleotide	Molecular Weight (g/mol)	Molar Extinction
dATP	535.2	1 µmol = 15,3 (A_{260})
dGTP	533.2	1 µmol = 13,7 (A_{252})
dCTP	511.1	1 µmol = 9,6 (A_{272})
dTTP	505.9	1 µmol = 8,4 (A_{260})

Reaction conditions

For direct use in DNA synthesis *in vitro*.

For primer extension technology, prepare a dNTP mix and dilute to give a final concentration of 200 µM of each dNTP in a total 100 µL reaction mix.

For long-range application, adjust accordingly.

Related products

Reagent	Pack. size	Reference
Mupid®-One electrophoresis system	1	MU-0041
Diamond Taq® (5U/μL)	1000 U	TAQ-I021-1000
HGS Diamond Taq® (5U/μL)	1000 U	TAQ-I011-1000+
GoldStar Mix 2x	5 x 1 ml 200 RXNs	PK-0064-02
Red'y'Gold Mix 2x	5 x 1 ml 200 RXNs	PK-0064-02R
SmartLadder	1000 lanes	MW-1700-10

For further information please contact our Customer Help Desk

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