#### EUROPE

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# 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	Quantity	Volume
dNTP Set 100 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, >99% deoxynucleoside triphosphates (HPLC, area > 99%), <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

Deoxy- nucleotide	Molecular Weight (g/mol)	Molar Extinction
dATP	535.2	1 µmol = 15,3 (A <sub>260</sub> )
dGTP	533.2	1 µmol = 13,7 (A <sub>252</sub> )
dCTP	511.1	1 µmol = 9,6 (A <sub>272</sub> )
dTTP	505.9	1 µmol = 8,4 (A <sub>260</sub> )

## **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  $\mu$ M of each dNTP in a total 100  $\mu$ L reaction mix.

For long-range application, adjust accordingly.

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# **Related products**

Reagent	Pack. size	Reference
Mupid®-One electrophoresis system	1	MU-0041
Diamond Taq <sup>®</sup> (5U/µL)	1000 U	TAQ-1021-1000-
HGS Diamond <i>Taq</i> ® (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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