

# dNTP Set, 100mM

## Product Handling Guide

Shipping:	On Dry or Blue Ice
Catalog number:	MDX050
Batch No.:	See vial
Concentration:	100 mM

Store at -20 °C



### Storage and stability:

dNTP Set, 100mM is shipped on dry or blue ice. On arrival store at -20 °C for optimum stability. Repeated freeze/thaw cycles should be avoided. Thawing during transportation does not affect the product performance. For long-term storage, aliquoting is recommended.

### Expiry:

When stored under the recommended conditions and handled correctly, full activity of the kit is retained until the expiry date on the outer box label.

### Safety precautions:

Read and understand the SDS (Safety Data Sheets) before handling the reagents. Hardcopies of the SDS will be provided with the first shipment, thereafter they will be available upon request.

### Quality control:

Bioline operates under ISO 13485 Quality Management System. dNTP Set, 100mM and its components are extensively tested for activity, processivity, efficiency, heat activation, sensitivity, absence of nuclease contamination and absence of nucleic acid contamination.

### Notes:

This reagent has been manufactured under 13485 Quality Management System and is suitable for further manufacturing use as an IVD component.

## Description

A set of ready-to-use sequencing grade ultra-pure dNTPs consisting of 4 separate 100mM solutions of dATP, dGTP, dCTP, and dTTP, supplied as lithium salts in purified water at pH 7.5, enzymatically synthesized from premium quality raw materials, using highly specific production systems in our purpose built facilities. The manufacturing process eliminates impurities and PCR-specific inhibitors such as modified nucleotides, tetraphosphates and pyrophosphates commonly observed in other commercially available dNTP products (>99% purity determined by quantitative HPLC).

Lithium salts have greater resistance to repeated freezing and thawing cycles than sodium salts, and lithium salt dNTP preparations remain sterile over the entire shelf-life due to the bacteriostatic activity of lithium towards various microorganisms.

## Kit components

Table 1

Component
dATP
dCTP
dGTP
dTTP

## dNTP Characteristics

Table 2

	Molecular weight	$\lambda$ max pH 7.0	$\epsilon$ at $\lambda$ max
dATP	514.9 g/mol	259 nm	15.4 E x mmol <sup>-1</sup> x cm <sup>-1</sup>
dCTP	490.9 g/mol	272 nm	9.1 E x mmol <sup>-1</sup> x cm <sup>-1</sup>
dGTP	530.9 g/mol	252 nm	13.7 E x mmol <sup>-1</sup> x cm <sup>-1</sup>
dTTP	505.9 g/mol	267 nm	9.6 E x mmol <sup>-1</sup> x cm <sup>-1</sup>

See individual dNTPs for a full list of characteristics

## Technical Support

For any technical enquiries, please contact our Technical Support team via email at: [mbi.tech@meridianlifescience.com](mailto:mbi.tech@meridianlifescience.com)

Related Products	Cat. No.
dATP, 100mM	MDX046
dCTP, 100mM	MDX047
dGTP, 100mM	MDX048
dTTP, 100mM	MDX049
dUTP, 100mM	MDX059
dNTP Mix, 100mM	MDX051
dNTP Mix, 40mM	MDX057
dUTP Mix, 100mM	MDX058
Low DNA Taq HS 5 U/ $\mu$ L	MDX009

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