

dNTPs

deoxyribonucleotides



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The molecular grade dNTPs are available as a set of four separate buffered dNTPs solutions (**dNTPs SET**) and also as accurate mixtures of ultrapure deoxynucleoside 5'-triphosphates (dATP, dCTP, dGTP, dTTP), ready to use in PCR, RT-PCR and Real-Time PCR applications (**dNTPs MIX**). Ready-to-use dNTPs MIX guarantees high amplification efficiency and prevents incorrect incorporation of dNTP in the synthesized DNA strand.

Deoxyribonucleotides are a crucial component of PCR reaction and their chemical purity has a significant influence on the PCR reaction results. They are supplied as **lithium salts** solutions (at pH 7.5 in purified PCR grade water), which provide **extended stability** and resistance to repeated freezing and thawing cycles.

Applications

- end-point PCR, long range PCR, Real-time PCR, RT-PCR
- cDNA synthesis
- primer extension
- DNA sequencing and labeling



Features and advantages

- **High quality:** the highest purity, determined by means of enzymatic synthesis and high resolution HPLC (> 99% dNTP, < 0.9% dNDP).
- **Increased sensitivity and yield:** allows the detection of a small number of copies of template DNA; effectively and efficiently amplifies even very large PCR amplicons.
- **Designed for PCR:** free of tetraphosphoranes, pyrophosphoranes and modified dNTPs, which often cause an inhibition of the PCR reaction.
- **Enzyme free:** DNase, RNase, Nickase, ATPase and pyrophosphatase free.
- **Long shelf-life:** the presence of lithium salt in the storage buffer guarantees high stability and resistance to frequent thawing and freezing cycles.
- **Choice of sets or mix packs:** matching the format to your needs.

Quality control

Functionality tested in PCR reactions. No unspecific nuclease activity detected.

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Components

Product	Concentration	Volume	Cat. No.
Equimolar mixtures of dATP, dCTP, dGTP, dTTP			
dNTPs MIX 8 mM Total	2 mM of each dNTP	1 ml	RP61
dNTPs MIX 10 mM Total	2.5 mM of each dNTP	1 ml	RP63
dNTPs MIX 40 mM Total	10 mM of each dNTP	1 ml	RP64
dNTPs MIX 100 mM Total	25 mM of each dNTP	1 ml	RP65
Sets of separate dATP, dCTP, dGTP and dTTP solutions			
dNTPs SET 10 mM	10 mM of each dNTP (separately)	4 × 1 ml	RP665
dNTPs SET 100 mM	100 mM of each dNTP (separately)	4 × 1 ml	RP675

Storage & shipping

Storage conditions

Store at -20°C upon receipt for optimum stability. Avoid repeated freeze/thaw cycles.

Shipping conditions

Shipping on dry or blue ice.

 For research use only

Expiry

The information on the label