

UltraPure dNTPs (dATP, dTTP, dCTP, dGTP)

CATALOG NO. GC-025-1000, 1 ml (each dNTP at 25 mM)

DESCRIPTION

Our UltraPure ready-to-use dNTPs (dATP, dTTP, dCTP, dGTP) solution has been optimized for various DNA applications.

APPLICATIONS

- Regular PCR and qPCR
- Reverse transcription (cDNA synthesis)
- DNA Sequencing
- DNA labeling

FEATURES

Optimized for PCR amplification and functionally tested for **long-range (>10 kb) PCR amplification**

SIZE

1 ml (each dNTP at 25 mM); enough for at least **one thousand** 100- μ l PCR reactions

QUALITY CONTROL

Quality controlled by HPLC for maximum purity and for minimal di- and mono-phosphate content

PURITY

>98% (by HPLC)

STORAGE

Store at -20 °C

APPLICATION GUIDELINES

To optimize the yield and the specificity of the PCR products (amplicons), it is recommended to keep the concentration of each dNTP at 200 μ M (0.2 mM) in the final reaction mixture. It is very important to use the four dNTPs (dATP, dTTP, dCTP, dGTP) at the equivalent concentration to minimize the mis-incorporation errors.

For high fidelity PCR amplification, lower dNTP concentrations (10-50 μ M each dNTP in the final reaction mixture) should be used. Low dNTP concentrations minimize mis-priming at non-target sequences and reduce the mis-incorporation rate.