7-deaza-dGTP

1-800-632-7799
info@neb.com
www.neb.com

N0445S 037120914091

N0445S

1.5 µmol **Lot: 0371209** **Exp: 9/14**

5 mM **Store at –20°C**

Description: 7-deaza-dGTP (7-deaza-2´-deoxyguanosine 5´-triphosphate) contains a 5 mM solution of 7-deaza-dGTP as a dilithium salt. Nucleotide concentration is determined by measurements of absorbance at 257 nm.

Supplied in: Milli-Q® water as a lithium salt at (pH 7.0).

Diluent Compatibility: Can be diluted using sterile distilled water, preferably Milli-Q water or can be diluted using sterile TE (10 mM Tris-HCl, 1 mM EDTA (pH 7.5).

Quality Control Assays

The purity of the deoxynucleotide is ≥ 95% as determined by HPLC analysis.

0.5 kb, 2 kb and 5 kb Lambda PCR Assay: 25 cycles of PCR amplification of 1 ng Lambda DNA with 5 units of *Taq* DNA Polymerase in the presence of 200 µM dATP, dCTP, dTTP and 7-deaza-dGTP, 0.5 µM primers and 1X ThermoPol™ Reaction Buffer results in the amplification of the specific 0.5 kb, 2 kb and 5 kb products as determined by agarose gel electrophoresis.

Phosphatase Activity Assay (pNPP Colorimetric Assay): A protein phosphatase buffer solution containing 2 mM 7-deaza-dGTP and 100 µM *p*-nitrophenol phosphate, incubated for 4 hours at 37°C, yields no detectable phosphatase activity as determined by spectrophotometric analysis of released *p*-nitrophenylene anion at 405 nm.

Non-Specific Nuclease Assay: A 50 µl reaction in 1X NEBuffer 2 containing 1 µg of T3 DNA or HindIII digested Lambda DNA and a minimum of 5 µl of 7-deaza-dGTP incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.

CERTIFICATE OF ANALYSIS

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