

Ribonucleotide Solution Mix



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



N0466S 014120513051

N0466S

8 μ mol each rNTP Lot: 0141205 Exp: 5/13

80 mM each rNTP Store at -20°C

Description: Ribonucleotide Solution Mix is a buffered equimolar solution of ribonucleotide triphosphates: rATP, rCTP, rGTP and rUTP.

Supplied as: sodium salts in 20 mM Tris-HCl (pH 8.0 @25°C).

Concentration: Each nucleotide is supplied at a concentration of 80 mM (total rNTP concentration equals 320 mM).

Quality Assurance: Ribonucleotides are certified free of detectable ribonucleases. Functional purity is determined by preparative *in vitro* transcription reactions.

Quality Control Assays:

Functional Assay: A preparative scale *in vitro* transcription reaction at 37°C for 2 hours, containing both BglII and StuI-linearized LITMUS 28iMal templates totaling 1 μ g DNA in 40 μ l, with rNTPs at a final concentration of 4 mM each produced the expected 902 bp double-stranded RNA product at a yield of at least 1 pmol (0.59 μ g) per μ l reaction, as confirmed by agarose gel electrophoresis and UV/VIS spectroscopy (nanodrop).

RNase Activity: A 10 μ l reaction in RNA polymerase buffer containing 40 ng of 300 base single-stranded RNA transcript and 1 μ l rNTP incubated 16 hours at 37°C resulted in < 30% degradation as determined by TBE-urea polyacrylamide gel electrophoresis.

Note: To ensure maximum activity upon long-term storage, aliquot and store at -80°C .

Companion Products Sold Separately:

T7 RNA Polymerase
#M0251S 5,000 units
#M0251L 25,000 units

SP6 RNA Polymerase
#M0207S 2,000 units
#M0207L 10,000 units

ShortCut RNase III
#M0245S 200 units
#M0245L 1,000 units

CERTIFICATE OF ANALYSIS

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