

Ribonucleotide Solution Set



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N0450S 007150217021

N0450S

10 µmol of each **Lot: 0071502**
Store at -20°C **Exp: 2/17**

Description: The Ribonucleotide Solution Set (NTP Set) consists of four separate solutions of ATP, GTP, CTP and UTP, pH 7.5 as sodium salts. The NTPs are also available as a Ribonucleotide Solution Mix (NEB #N0466).

Reagents Supplied:

| | |
|---------------------|--------|
| 100 mM ATP Solution | 0.1 ml |
| 100 mM CTP Solution | 0.1 ml |
| 100 mM GTP Solution | 0.1 ml |
| 100 mM UTP Solution | 0.1 ml |

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Diluent Compatibility: Can be diluted using nuclease-free water.

Applications:

- *In vitro* transcription
- RNA tailing by Poly(A) and Poly(U) Polymerases
- Substrates or cofactors for many enzymes

Quality Controls

NTPs are highly purified, > 99% pure by HPLC, and are free from detectable DNase, RNase and Nickase. They were validated by *in vitro* transcription using the T7 High Yield RNA Synthesis Kit (NEB #E2040).

RNase Assay: Incubation of a 10 µl reaction containing 1 µl of NTP with 40 ng of 300 base RNA transcript for 16 hours at 37°C resulted in no detectable degradation of RNA as determined by denaturing PAGE analysis.

Endonuclease Assay: Incubation of a 10 µl reaction containing 1 µl of NTP with 300 ng of supercoiled plasmid for 16 hours at 37°C produced less than 10% nicked or linear molecules as determined by agarose gel electrophoresis.

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Usage Notes: Store at -20°C. Avoid multiple freeze/thaw cycles. Dilute with nuclease-free water when necessary. NTPs are used with many RNA products from NEB.

Companion Products Sold Separately:

T7 High Yield RNA Synthesis Kit
#E2040S 50 rxns

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