

New England Biolabs Product Specification

Product Name: Ribonucleotide Solution Set
Catalog #: N0450S/L
Concentration: 100 mM each NTP
Shelf Life: 24 months
Storage Temp: -20°C
Storage Conditions: Supplied as Sodium salts, pH 7.5
Specification Version: PS-N0450S/L v1.0
Effective Date: 23 May 2018

Assay Name/Specification (minimum release criteria)

Endonuclease Activity (Nicking) - A 50 µl reaction in NEBuffer 4 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 500 nmol of each ribonucleotide incubated for 16 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.

Functional Testing (High Yield RNA Synthesis) - A 20 µl reaction in transcription reaction buffer containing 1 µg FLuc Control Template, 2 µl T7 RNA Polymerase Mix, and 10 mM ribonucleotides (each) incubated for 2 hours at 37°C yields ≥ 150 µg RNA transcript.

RNase Activity (Extended Digestion) - A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 100 nmol of each ribonucleotide is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.



Date 23 May 2018

Derek Robinson
Director of Quality Control

