

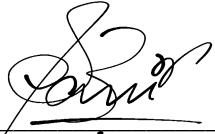
New England Biolabs Certificate of Analysis

Product Name: *Ribonucleotide Solution Set*
 Catalog Number: *N0450L*
 Lot Number: *10048460*
 Expiration Date: *03/2021*
 Storage Temperature: *-20°C*
 Storage Conditions: *Supplied as Sodium salts, pH 7.5*
 Specification Version: *PS-N0450S/L v1.0*

| Ribonucleotide Solution Set Component List | | | |
|--------------------------------------------|-----------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| N0454AAVIAL | CTP Solution | 10039101 | Pass |
| N0453AAVIAL | UTP Solution | 10039099 | Pass |
| N0452AAVIAL | GTP Solution | 10039098 | Pass |
| N0451AAVIAL | ATP Solution | 10039090 | Pass |

| Assay Name/Specification | Lot # 10048460 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| <p>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.</p> | Pass |
| <p>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.</p> | Pass |
| <p>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.</p> | Pass |

This product has been tested and shown to be in compliance with all specifications.



Bhairavi Jani
Production Scientist
21 Jun 2019



Josh Hersey
Packaging Quality Control Inspector
21 Jun 2019