

## New England Biolabs Certificate of Analysis

**Product Name:** Ribonucleotide Solution Mix  
**Catalog Number:** N0466L  
**Concentration:** 25 mM  
**Packaging Lot Number:** 10067635  
**Expiration Date:** 02/2022  
**Storage Temperature:** -20°C  
**Storage Conditions:** Supplied as Sodium salts, pH 7.5  
**Specification Version:** PS-N0466S/L v1.0

Ribonucleotide Solution Mix Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N0466SVIAL	Ribonucleotide Solution Mix	10067095	Pass

Assay Name/Specification	Lot # 10067635
<b>Endonuclease Activity (Nicking)</b> A 50 µl reaction in NEBuffer 4 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 500 nmol of Ribonucleotide Solution Mix incubated for 16 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
<b>Functional Testing (High Yield RNA Synthesis)</b> 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.	Pass
<b>RNase Activity (Extended Digestion)</b> A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 100 nmol of Ribonucleotide Solution Mix is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using gel electrophoresis.	Pass

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

*Dongxian Yue*

Dongxian Yue  
Production Scientist  
10 Feb 2020

*Michael Tonello*

Michael Tonello  
Packaging Quality Control Inspector  
11 Feb 2020