

New England Biolabs Certificate of Analysis

Product Name: *RNase Inhibitor, Murine*
Catalog Number: *M0314L*
Concentration: *40,000 U/ml*
Unit Definition: *One unit is defined as the amount of Murine RNase Inhibitor required to inhibit the activity of 5ng of RNase A by 50%. Activity is measured by the inhibition of hydrolysis of cytidine 2', 3'-cyclic monophosphate by RNase A.*
Packaging Lot Number: *10254028*
Expiration Date: *04/2026*
Storage Temperature: *-20°C*
Storage Conditions: *50 mM KCl , 20 mM HEPES (pH 7.6), 8 mM DTT , 50 % Glycerol*
Specification Version: *PS-M0314S/L v1.0*

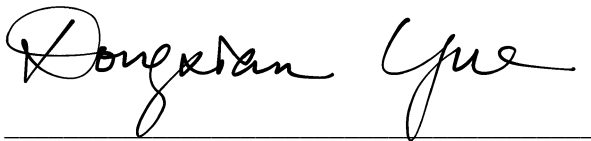
RNase Inhibitor, Murine Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0314LVIAL	RNase Inhibitor, Murine	10234881	Pass

Assay Name/Specification	Lot # 10254028
Endonuclease Activity (Nicking) A 50 µl reaction in NEBuffer 4 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 40 units of RNase Inhibitor, Murine incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 4 containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 200 units of RNase Inhibitor, Murine incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Latent RNase Activity (Extended Digest) A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 40 units of heat inactivated RNase Inhibitor, Murine is incubated at 37°C. After incubation for 4 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	Pass
Protein Purity Assay (SDS-PAGE) RNase Inhibitor, Murine is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass

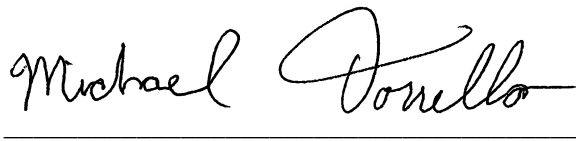
Assay Name/Specification	Lot # 10254028
RNase Activity (Extended Digestion) A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 40 units of RNase Inhibitor, Murine is incubated at 37°C. After incubation for 4 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	Pass

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.



Dongxian Yue
Production Scientist
26 Apr 2024



Michael Tonello
Packaging Quality Control Inspector
08 Aug 2024