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## 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: 10204317
Expiration Date: 08/2025
Storage Temperature: -20°C

Storage Conditions: 50 mM KCI, 20 mM HEPES (pH 7.6), 8 mM DTT, 50 % Glycerol

Specification Version: PS-M0314S/L v1.0

RNase Inhibitor, Murine Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
M0314LVIAL	RNase Inhibitor, Murine	10200656	Pass	

Assay Name/Specification	Lot # 10204317
Endonuclease Activity (Nicking) A 50 μl reaction in NEBuffer 4 containing 1 μg of supercoiled PhiX174 DNA and a	Pass
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.	
Exonuclease Activity (Radioactivity Release) A 50 μl reaction in NEBuffer 4 containing 1 μg of a mixture of single and double-stranded [ ³H] 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



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Assay Name/Specification	Lot # 10204317
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.

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Dongxian Yue Production Scientist

07 Aug 2023

Michael Tonello

Packaging Quality Control Inspector

07 Aug 2023

