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## New England Biolabs Certificate of Analysis

Product Name: RNase Inhibitor, Murine

Catalog Number: M0314S
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.

Lot Number: 10021645
Expiration Date: 07/2020
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	
M0314SVIAL	RNase Inhibitor, Murine	10013345	Pass	

Assay Name/Specification	Lot # 10021645
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 [ 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 # 10021645
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.

Dongxian Yue Production Scientist

17 Jul 2018

Michael Tonello

Packaging Quality Control Inspector

28 Sep 2018

