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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: 10071220
Expiration Date: 02/2022
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				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
M0314LVIAL	RNase Inhibitor, Murine	10066715	Pass	

Assay Name/Specification	Lot # 10071220
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	Pass
in <10% conversion to the nicked form as determined by agarose gel electrophoresis. Exonuclease Activity (Radioactivity Release)	Pass
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.	1 433
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 # 10071220
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

05 Feb 2020

Josh Hersey

Packaging Quality Control Inspector

31 Mar 2020

