

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## 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.

Lot Number: 10046913
Expiration Date: 04/2021
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	10037468	Pass	

Assay Name/Specification	Lot # 10046913
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) 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 # 10046913
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

12 Apr 2019

Jay Minichiello

Packaging Quality Control Inspector

27 Jun 2019