

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: 10073044
Expiration Date: 02/2022
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	10066715	Pass

Assay Name/Specification	Lot # 10073044
Protein Purity Assay (SDS-PAGE) RNase Inhibitor, Murine is $\geq 95\%$ pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass
RNase Activity (Extended Digestion) A 10 μ l 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
Endonuclease Activity (Nicking) A 50 μ l reaction in NEBuffer 4 containing 1 μ g 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 μ l reaction in NEBuffer 4 containing 1 μ g 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

Assay Name/Specification	Lot # 10073044
<p>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.</p>	<p>Pass</p>

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



Bhairavi Jani
Production Scientist
15 Jun 2020



Josh Hersey
Packaging Quality Control Inspector
15 Jun 2020