

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: 10097156
Expiration Date: 07/2022
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 | 10079149 | Pass |

| Assay Name/Specification | Lot # 10097156 |
|--|----------------|
| <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> | Pass |
| <p>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.</p> | Pass |
| <p>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.</p> | Pass |
| <p>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</p> | Pass |


| Assay Name/Specification | Lot # 10097156 |
|---|--------------------|
| <p>incubation for 4 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.</p> <p>Protein Purity Assay (SDS-PAGE) RNase Inhibitor, Murine is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p> | <p>Pass</p> |

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

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Bhairavi Jani
Production Scientist
26 Feb 2021



Michael Tonello
Packaging Quality Control Inspector
26 Feb 2021