

## New England Biolabs Certificate of Analysis

**Product Name:** RNase If  
**Catalog Number:** M0243S  
**Concentration:** 50,000 U/ml  
**Unit Definition:** One unit is defined as the amount of enzyme required to fully digest 1 picomole of synthetic ssRNA 33-mer in a total reaction volume of 10 µl in 15 minutes in 1X NEBuffer 3 as visualized on a 20% acrylamide gel.  
**Packaging Lot Number:** 10151527  
**Expiration Date:** 05/2024  
**Storage Temperature:** -20°C  
**Storage Conditions:** 10 mM Tris-HCl, 100 mM NaCl, 1 mM DTT, 0.5 mM EDTA, 50 % Glycerol, (pH 8.0 @ 25°C)  
**Specification Version:** PS-M0243S/L v1.0

RNase If Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0243SVIAL	RNase If	10151528	Pass
B7003SVIAL	NEBuffer™ 3	10143290	Pass

Assay Name/Specification	Lot # 10151527
<b>Exonuclease Activity (Radioactivity Release)</b> A 50 µl reaction in NEBuffer 3 containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] E. coli DNA and a minimum of 50 units of RNase If incubated for 1 hour at 37°C releases <0.1% of the total radioactivity.	Pass
<b>Endonuclease Activity (Nicking)</b> A 50 µl reaction in NEBuffer 3 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 50 units of RNase If incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit [www.neb.com/trademarks](http://www.neb.com/trademarks) for additional information.

*Timothy Meixsell*

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09 Jun 2022

*Erin Varney*

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09 Jun 2022