

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: *10236210*
Expiration Date: *12/2025*
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	10228150	Pass
B7003SVIAL	NEBuffer™ 3	10173669	Pass

Assay Name/Specification	Lot # 10236210
Endonuclease Activity (Nicking) 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
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 3 containing 1 µg of a mixture of single and double-stranded [³ 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

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 for additional information.

Nancy Considine

Nancy Considine
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15 Dec 2022

Michael Tonello

Michael Tonello
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11 Mar 2024