

New England Biolabs Product Specification

<i>Product Name:</i>	<i>RNase If</i>
<i>Catalog #:</i>	<i>M0243S/L</i>
<i>Concentration:</i>	<i>50,000 units/ml</i>
<i>Unit Definition:</i>	<i>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.</i>
<i>Shelf Life:</i>	<i>24 months</i>
<i>Storage Temp:</i>	<i>-20°C</i>
<i>Storage Conditions:</i>	<i>10 mM Tris-HCl, 100 mM NaCl, 1 mM DTT, 0.5 mM EDTA, 50 % Glycerol, (pH 8.0 @ 25°C)</i>
<i>Specification Version:</i>	<i>PS-M0243S/L v1.0</i>
<i>Effective Date:</i>	<i>23 May 2018</i>

Assay Name/Specification (minimum release criteria)

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.

Exonuclease Activity (Radioactivity Release) - A 50 µl reaction in NEBuffer 3 containing 1 µg of a mixture of single and double-stranded [³H] *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.



Date 23 May 2018

Derek Robinson
Director of Quality Control

