

## New England Biolabs Product Specification

<i>Product Name:</i>	<i>XRN-1</i>
<i>Catalog #:</i>	<i>M0338S/L</i>
<i>Concentration:</i>	<i>1,000 units/ml</i>
<i>Unit Definition:</i>	<i>One unit is defined as the amount of enzyme that digests 1 µg of phosphorylated yeast RNA in 60 minutes at 37°C.</i>
<i>Shelf Life:</i>	<i>24 months</i>
<i>Storage Temp:</i>	<i>-20°C</i>
<i>Storage Conditions:</i>	<i>20 mM Tris-HCl, 500 mM NaCl, 2 mM DTT, 0.1 mM EDTA, 0.1% Triton<sup>®</sup>X-100, 50% Glycerol, (pH 7.5 @ 25°C)</i>
<i>Specification Version:</i>	<i>PS-M0338S/L v1.0</i>
<i>Effective Date:</i>	<i>06 Dec 2017</i>

### Assay Name/Specification (minimum release criteria)

**Endonuclease Activity (Circular Single Stranded DNA)** - A 50 µl reaction in NEBuffer 3 containing 1 µg of M13mp18 DNA and a minimum of 5 units of XRN-1 incubated for 4 hours at 37°C results in <10% conversion to linear DNA as determined by agarose gel electrophoresis.

**Endonuclease Activity (Nicking)** - A 50 µl reaction in NEBuffer 3 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 5 units of XRN-1 incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.

**Protein Purity Assay (SDS-PAGE)** - XRN-1 is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.



Date 06 Dec 2017

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Director of Quality Control

