

## New England Biolabs Certificate of Analysis

*Product Name:* Poly(U) Polymerase  
*Catalog #:* M0337S  
*Concentration:* 2,000 units/ml  
*Unit Definition:* One unit is defined as the amount of enzyme that incorporates 1 nmol of UMP into RNA in a 50 µl reaction incubated for 10 minutes at 37°C.  
*Lot #:* 0031802  
*Assay Date:* 02/2018  
*Expiration Date:* 02/2020  
*Storage Temp:* -20°C  
*Storage Conditions:* 10 mM Tris-HCl, 100 mM NaCl, 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, (pH 7.5 @ 25°C)  
*Specification Version:* PS-M0337S v1.0  
*Effective Date:* 13 Jun 2018

Assay Name/Specification (minimum release criteria)	Lot #0031802
<b>Endonuclease Activity (Nicking)</b> - A 50 µl reaction in NEBuffer 2 containing 1 µg of supercoiled pUC19 DNA and a minimum of 10 units of Poly(U) Polymerase incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	<b>Pass</b>
<b>Exonuclease Activity (Radioactivity Release)</b> - A 50 µl reaction in NEBuffer 2 containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] <i>E. coli</i> DNA and a minimum of 10 units of Poly(U) Polymerase incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	<b>Pass</b>
<b>Protein Purity Assay (SDS-PAGE)</b> - Poly(U) Polymerase is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	<b>Pass</b>
<b>RNase Activity (Extended Digestion)</b> - A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 2 units of Poly(U) Polymerase is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	<b>Pass</b>



Authorized by  
Derek Robinson  
13 Jun 2018



Inspected by  
Bhairavi Jani  
01 Feb 2018

