

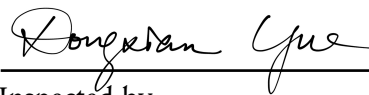
## New England Biolabs Certificate of Analysis

*Product Name:* *E. coli Poly(A) Polymerase*  
*Catalog #:* *M0276S/L*  
*Concentration:* *5,000 units/ml*  
*Unit Definition:* *One unit is defined as the amount of enzyme that will incorporate 1 nmol of AMP into RNA in a 20 µl volume in 10 minutes at 37°C.*  
*Lot #:* *0171707*  
*Assay Date:* *07/2017*  
*Expiration Date:* *7/2019*  
*Storage Temp:* *-20°C*  
*Storage Conditions:* *20 mM Tris-HCl, 300 mM NaCl, 1 mM EDTA, 1 mM DTT, 0.1 % Triton®X-100, 50% Glycerol, (pH 7.5 @ 25°C)*  
*Specification Version:* *PS-M0276S/L v1.0*  
*Effective Date:* *07 May 2018*

Assay Name/Specification (minimum release criteria)	Lot #0171707
<b>Endonuclease Activity (Nicking)</b> - A 50 µl reaction in Poly(A) Polymerase Reaction Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 15 units of <i>E. coli</i> Poly(A) 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 Poly(A) Polymerase Reaction Buffer containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] <i>E. coli</i> DNA and a minimum of 15 units of <i>E. coli</i> Poly(A) 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> - <i>E. coli</i> Poly(A) 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 5 units of <i>E. coli</i> Poly(A) Polymerase is incubated at 37°C. After incubation for 4 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.	<b>Pass</b>



Authorized by  
Derek Robinson  
07 May 2018



Inspected by  
Dongxian Yue  
18 Sep 2017

