NEW ENGLAND BioLabs Inc.
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240 County Road
Ipswich, MA 01938-2723
Tel 978-927-5054
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New England Biolabs
Certificate of Analysis

Product Name:	*E.coli Poly (A) Polymerase*
Catalog Number:	*M0276S*
Concentration:	*5,000 U/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.*
Packaging Lot Number:	*10106646*
Expiration Date:	*02/2023*
Storage Temperature:	*-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*

E.coli Poly (A) Polymerase Component List

NEB Part Number	Component Description	Lot Number	Individual QC Result
M0276SVIAL	E.coli Poly (A) Polymerase	10106645	**Pass**
B0756AVIAL	Adenosine-5'-Triphosphate (ATP)	10100015	**Pass**
B0276SVIAL	Poly(A) Polymerase Reaction Buffer	10091363	**Pass**

Assay Name/Specification	Lot # 10106646
RNase Activity (Extended Digestion) A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 5 units of E. coli 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.	**Pass**
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in Poly(A) Polymerase Reaction Buffer containing 1 µg of a mixture of single and double-stranded [^{3}H] E. coli DNA and a minimum of 15 units of E. coli Poly(A) Polymerase incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	**Pass**
Protein Purity Assay (SDS-PAGE) E. coli Poly(A) Polymerase is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	**Pass**
Endonuclease Activity (Nicking) A 50 µl reaction in Poly(A) Polymerase Reaction Buffer containing 1 µg of	**Pass**

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Assay Name/Specification	Lot # 10106646
supercoiled PhiX174 DNA and a minimum of 15 units of E. coli Poly(A) Polymerase incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	

This product has been tested and shown to be in compliance with all specifications.

Bhairavi Jani
Production Scientist
25 May 2021

Michael Tonello
Packaging Quality Control Inspector
25 May 2021