NEW ENGLAND BioLabs Inc.
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Ipswich, MA 01938-2723
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www.neb.com
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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:	*10129012*
Expiration Date:	*09/2023*
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	10121341	**Pass**
B0756AVIAL	Adenosine-5'-Triphosphate (ATP)	10118949	**Pass**
B0276SVIAL	Poly(A) Polymerase Reaction Buffer	10114403	**Pass**

Assay Name/Specification	Lot # 10129012
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**
Endonuclease Activity (Nicking) A 50 µl reaction in Poly(A) Polymerase Reaction Buffer containing 1 µg of 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.	**Pass**

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Assay Name/Specification	Lot # 10129012
Protein Purity Assay (SDS-PAGE) E. coli Poly(A) Polymerase is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	**Pass**

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.

Bhairavi Jani
Production Scientist
30 Nov 2021

Josh Hersey
Packaging Quality Control Inspector
30 Nov 2021