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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: 10069229
Expiration Date: 10/2021
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				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
M0276SVIAL	E.coli Poly (A) Polymerase	10058339	Pass	
B0756AVIAL	Adenosine-5'-Triphosphate (ATP)	10056377	Pass	
B0276SVIAL	Poly(A) Polymerase Reaction Buffer	10064699	Pass	

Assay Name/Specification	Lot # 10069229
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
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 [ ³H] 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
RNase Activity (Extended Digestion) A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA	Pass



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Assay Name/Specification	Lot # 10069229
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.	

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

Bhairavi Jani

Production Scientist

08 Apr 2020

Jay Minichiello

Packaging Quality Control Inspector

08 Apr 2020

