

New England Biolabs Certificate of Analysis

Product Name: *E.coli Poly (A) Polymerase*
Catalog Number: M0276L
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: 10168537
Expiration Date: 09/2024
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
M0276LVIAL	E.coli Poly (A) Polymerase	10165554	Pass
B0756AVIAL	Adenosine-5'-Triphosphate (ATP)	10163583	Pass
B0276SVIAL	Poly(A) Polymerase Reaction Buffer	10141265	Pass

Assay Name/Specification	Lot # 10168537
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 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	Pass

Assay Name/Specification	Lot # 10168537
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.

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Jessica Cane
Production Scientist
13 Sep 2022



Josh Hersey
Packaging Quality Control Inspector
21 Oct 2022