

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: 10181106
Expiration Date: 10/2024
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)	10177025	Pass
B0276SVIAL	Poly(A) Polymerase Reaction Buffer	10176765	Pass

Assay Name/Specification	Lot # 10181106
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

Assay Name/Specification	Lot # 10181106
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.

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.



Jessica Cane
Production Scientist
12 Oct 2022



Josh Hersey
Packaging Quality Control Inspector
15 Feb 2023