

New England Biolabs Certificate of Analysis

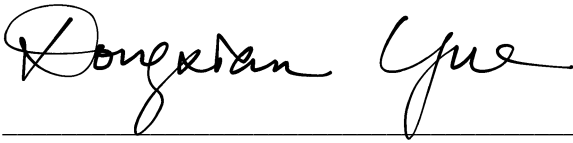
Product Name: *E.coli RNA Polymerase, Core Enzyme*
Catalog Number: M0550S
Concentration: 1,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to incorporate 1 nmole NTP into RNA in 10 minutes at 37°C in the presence of sigma factor 70.
Lot Number: 10048084
Expiration Date: 07/2021
Storage Temperature: -20°C
Storage Conditions: 20 mM Tris-HCl, 100 mM NaCl, 1 mM DTT, 0.1 mM EDTA, 50 % Glycerol, (pH 7.5 @ 25°C)
Specification Version: PS-M0550S v1.0

| E.coli RNA Polymerase, Core Enzyme Component List | | | |
|---|---|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| M0550SVIAL | E.coli RNA Polymerase, Core Enzyme | 10048085 | Pass |
| B0550AVIAL | 5X E. coli RNA Polymerase Reaction Buffer | 10048086 | Pass |

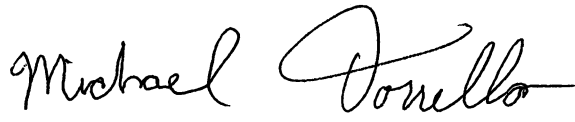
| Assay Name/Specification | Lot # 10048084 |
|---|----------------|
| <p>Endonuclease Activity (Nicking) A 50 µl reaction in NEBuffer 4 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 5 units of E. coli RNA Polymerase, Core Enzyme incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.</p> | Pass |
| <p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 4 containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 5 units of E. coli RNA Polymerase, Core Enzyme incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p> | Pass |
| <p>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 1 unit of E. coli RNA Polymerase, Core Enzyme 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.</p> | Pass |

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





Dongxian Yue
Production Scientist
01 Jul 2019



Michael Tonello
Packaging Quality Control Inspector
12 Jul 2019