

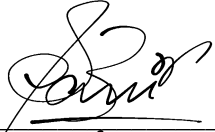
New England Biolabs Certificate of Analysis

Product Name: 5' Deadenylase
Catalog Number: M0331S
Concentration: 50,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to remove 10 pmoles of AMP from a 5'adenylated DNA oligo in 10 minutes at 30°C.
Lot Number: 10013503
Expiration Date: 04/2020
Storage Temperature: -20°C
Storage Conditions: 100 mM NaCl, 10 mM Tris-HCl, 1 mM DTT, 0.1 mM EDTA, 0.1% Triton®X-100, 50% Glycerol, (pH 7.5 @ 25°C)
Specification Version: PS-M0331S v1.0

| 5' Deadenylase Component List | | | |
|-------------------------------|-----------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| M0331SVIAL | 5' Deadenylase | 0031804 | Pass |
| B7001SVIAL | NEBuffer™ 1 | 0101804 | Pass |

| Assay Name/Specification | Lot # 10013503 |
|--|----------------|
| Protein Purity Assay (SDS-PAGE) 5' Deadenylase 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 f-300 RNA transcript and a minimum of 50 units of 5' Deadenylase 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 |
| Endonuclease Activity (Nicking) A 50 µl reaction in NEBuffer 1 containing 1 µg of supercoiled PhiX174 RF I DNA and a minimum of 50 units of 5' Deadenylase 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 NEBuffer 1 containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 150 units of 5' Deadenylase incubated for 4 hours at 37°C releases <0.1% of the total radioactivity. | Pass |

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



Bhairavi Jani
Production Scientist
05 Jul 2018



Mary Conlon
Packaging Quality Control Inspector
05 Jul 2018