

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: 10043590
Expiration Date: 06/2021
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	10043591	Pass
B7001SVIAL	NEBuffer™ 1	10041625	Pass

Assay Name/Specification	Lot # 10043590
<p>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.</p>	Pass
<p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 1 containing 1 µg of a mixture of single and double-stranded [³H] 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.</p>	Pass
<p>Protein Purity Assay (SDS-PAGE) 5' Deadenylase is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>	Pass
<p>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.</p>	Pass

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



Doreen Duquette
Production Scientist
17 Apr 2019



Jay Minichiello
Packaging Quality Control Inspector
28 Jun 2019