

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.
Packaging Lot Number: 10185544
Expiration Date: 03/2025
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	10183133	Pass
B7001SVIAL	NEBuffer™ 1	10167590	Pass

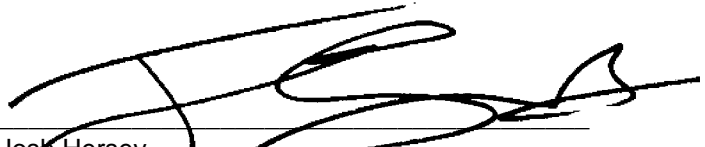
Assay Name/Specification	Lot # 10185544
<p>Endonuclease Activity (Nicking) A 50 µl reaction in NEBuffer 1 containing 1 µg of supercoiled PhiX174 RF I DNA and a minimum of 50 units of 5' Deadenylase incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel 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.

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.



Bo Wu
Production Scientist
15 Mar 2023



Josh Hersey
Packaging Quality Control Inspector
22 Jun 2023