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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: 10031200
Expiration Date: 12/2020
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	10031205	Pass	
B7001SVIAL	NEBuffer™ 1	0101804	Pass	

Assay Name/Specification	Lot # 10031206
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 [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.	Pass
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



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

Dongxian Yue Production Scientist

31 Dec 2018

Josh Hersey

Packaging Quality Control Inspector

04 Jan 2019



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