

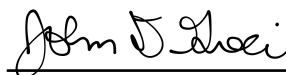
New England Biolabs Certificate of Analysis

Product Name: Exonuclease V (RecBCD)
Catalog #: M0345S/L
Concentration: 10,000 units/ml
Unit Definition: One unit is defined as the amount of enzyme required to produce 1 nmol of acid-soluble deoxyribonucleotide from double-stranded DNA in 30 minutes at 37°C in a total reaction volume of 50 µl.
Lot #: 0011712
Assay Date: 12/2017
Expiration Date: 12/2019
Storage Temp: -20°C
Storage Conditions: 50 mM Tris-HCl, 100 mM NaCl, 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 0.1% Triton®X-100, (pH 7.5 @ 25°C)
Specification Version: PS-M0345S/L v1.0
Effective Date: 09 Apr 2018

Assay Name/Specification (minimum release criteria)	Lot #0011712
Endonuclease Activity (Nicked Double-Stranded DNA) - A 50 µl reaction in NEBuffer 4 supplemented with 1 mM ATP containing 1 µg of nicked PhiX174 RF II DNA and a minimum of 50 units of Exonuclease V (RecBCD) incubated for 4 hours at 37°C results in <10% loss in PhiX174 RF II DNA as determined by agarose gel electrophoresis.	Pass
Endonuclease Activity (Nicking) - A 50 µl reaction in NEBuffer 4 supplemented with 1 mM ATP containing 1 µg of supercoiled PhiX174 RF I DNA and a minimum of 100 units of Exonuclease V (RecBCD) incubated for 4 hours at 37°C results in <10% loss in supercoiled DNA as determined by agarose gel electrophoresis.	Pass
Protein Purity Assay (SDS-PAGE) - Exonuclease V (RecBCD) 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 a 300 base single-stranded RNA and a minimum of 10 units of Exonuclease V (RecBCD) 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



Authorized by
Derek Robinson
09 Apr 2018



Inspected by
John Greci
14 Dec 2017

