

New England Biolabs Certificate of Analysis

Product Name: Exonuclease V (RecBCD)
Catalog Number: M0345S
Concentration: 10,000 U/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.
Packaging Lot Number: 10088295
Expiration Date: 08/2022
Storage Temperature: -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

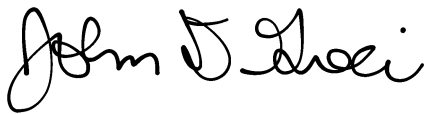
Exonuclease V (RecBCD) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
P0756SVIAL	Adenosine 5'-Triphosphate (ATP)	10085171	Pass
M0345SVIAL	Exonuclease V (RecBCD)	10081098	Pass
B7004SVIAL	NEBuffer™ 4	10074983	Pass

Assay Name/Specification	Lot # 10088295
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
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

Assay Name/Specification	Lot # 10088295
<p>Protein Purity Assay (SDS-PAGE) Exonuclease V (RecBCD) is \geq 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>	<p>Pass</p>

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.



John Greci
Production Scientist
13 Nov 2020



Josh Hersey
Packaging Quality Control Inspector
13 Nov 2020