

New England Biolabs Certificate of Analysis

Product Name: BpuEI
Catalog Number: R0633S
Concentration: 5,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at 37°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10071001
Expiration Date: 04/2021
Storage Temperature: -20°C
Storage Conditions: 300 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 500 µg/ml BSA
Specification Version: PS-R0633S/L v2.0

BpuEI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0633SVIAL	BpuEI	10071000	Pass
B9003SVIAL	S-adenosylmethionine (SAM)	10070537	Pass
B7204SVIAL	CutSmart® Buffer	10071078	Pass

Assay Name/Specification	Lot # 10071001
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 5 units of BpuEI incubated for 4 hours at 37°C releases <0.5% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 2-fold over-digestion of Lambda DNA with BpuEI, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, ~50% can be recut with BpuEI.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 15 Units of BpuEI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Protein Purity Assay (SDS-PAGE) BpuEI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	Pass

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



Penghua Zhang
Production Scientist
05 May 2020



Jay Minichiello
Packaging Quality Control Inspector
05 May 2020