

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: 10091783
Expiration Date: 09/2022
Storage Temperature: -20°C
Storage Conditions: 300 mM NaCl, 10 mM Tris-HCl, 1 mM DTT, 0.1 mM EDTA, 0.32 mM S-adenosylmethionine (SAM), 50% Glycerol, 500 µg/ml BSA (pH 7.4 @ 25°C)
Specification Version: PS-R0633S v3.0

BpuEI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0633SVIAL	BpuEI	10086570	Pass
B7204SVIAL	CutSmart® Buffer	10089402	Pass

Assay Name/Specification	Lot # 10091783
<p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³H] 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.</p>	Pass
<p>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.</p>	Pass
<p>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.</p>	Pass
<p>Protein Purity Assay (SDS-PAGE) BpuEI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.</p>	Pass

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

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23 Nov 2020



Michael Tonello
Packaging Quality Control Inspector
23 Nov 2020