

New England Biolabs Certificate of Analysis

Product Name: BspHI
Catalog Number: R0517L
Concentration: 10,000 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: 10076403
Expiration Date: 06/2022
Storage Temperature: -20°C
Storage Conditions: 100 mM KCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA
Specification Version: PS-R0517S/L v1.0

BspHI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0517LVIAL	BspHI	10076404	Pass
B7204SVIAL	CutSmart® Buffer	10075570	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10075964	Pass

Assay Name/Specification	Lot # 10076403
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 100 units of BspHI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with BspHI, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with BspHI.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 50 Units of BspHI 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) BspHI 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
13 Jul 2020



Michael Tonello
Packaging Quality Control Inspector
13 Jul 2020