

New England Biolabs Certificate of Analysis

Product Name: BspMI
Catalog Number: R0502S
Concentration: 2,000 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.
Lot Number: 10047735
Expiration Date: 06/2021
Storage Temperature: -20°C
Storage Conditions: 500 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA
Specification Version: PS-R0502S/L v1.0

BspMI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0502SVIAL	BspMI	10047396	Pass
B7203SVIAL	NEBuffer™ 3.1	10041637	Pass

Assay Name/Specification	Lot # 10047735
Protein Purity Assay (SDS-PAGE) BspMI is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of Lambda DNA and a minimum of 2 Units of BspMI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 20 units of BspMI 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 BspMI, >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 BspMI.	Pass

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



Doreen Duquette
Production Scientist
05 Apr 2019



Jay Minichiello
Packaging Quality Control Inspector
20 Jun 2019