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## New England Biolabs Certificate of Analysis

Product Name: BsaHI
Catalog Number: R0556S
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 50 μl of reaction buffer.

Lot Number: 10049567
Expiration Date: 07/2021
Storage Temperature: -20°C

Storage Conditions: 250 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50%

Glycerol, 0.15% Triton X-100, 200 µg/ml BSA

Specification Version: PS-R0556S/L v1.0

BsaHl Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
R0556SVIAL	BsaHl	10049568	Pass	
B7204SVIAL	CutSmart® Buffer	10046082	Pass	

Assay Name/Specification	Lot # 10049567
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 100 units of BsaHl 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 BsaHI, >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 BsaHI.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 100 Units of BsaHl incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass

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



R0556S / Lot: 10049567



Stephanie Cornelio Production Scientist 11 Jul 2019 Jay Minichiello

Packaging Quality Control Inspector

07 Aug 2019