

New England Biolabs Certificate of Analysis

Product Name: BstUI
Catalog Number: R0518S
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 60°C in 50 µl assay buffer.
Packaging Lot Number: 10113050
Expiration Date: 06/2023
Storage Temperature: -20°C
Storage Conditions: 50 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-R0518S/L v1.0

BstUI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0518SVIAL	BstUI	10111146	Pass
B6004SVIAL	rCutSmart™ Buffer	10108732	Pass

Assay Name/Specification	Lot # 10113050
Ligation and Recutting (Terminal Integrity) After a 20-fold over-digestion of Lambda DNA with BstUI, ~50% 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 BstUI.	Pass
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 BstUI incubated for 4 hours at 60°C releases <0.1% of the total radioactivity.	Pass
Protein Purity Assay (SDS-PAGE) BstUI 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 CutSmart® Buffer containing 1 µg of Lambda DNA and a minimum of 100 Units of BstUI incubated for 16 hours at 60°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.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.



Pengda Zhang
Production Scientist
06 Jul 2021



Michael Tonello
Packaging Quality Control Inspector
06 Jul 2021