

New England Biolabs Certificate of Analysis

Product Name: BstXI
Catalog Number: R0113S
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.
Lot Number: 10050189
Expiration Date: 07/2021
Storage Temperature: -20°C
Storage Conditions: 300 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 500 µg/ml BSA
Specification Version: PS-R0113S/L v1.0


BstXI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0113SVIAL	BstXI	10050190	Pass
B7203SVIAL	NEBuffer™ 3.1	10041002	Pass

Assay Name/Specification	Lot # 10050189
<p>Endonuclease Activity (Nicking) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of supercoiled pUC19 DNA and a minimum of 50 units of BstXI incubated for 4 hours at 37°C results in <20% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	Pass
<p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 100 units of BstXI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p>	Pass
<p>Ligation and Recutting (Terminal Integrity) After a 20-fold over-digestion of Lambda DNA with BstXI, >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 BstXI.</p>	Pass
<p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of Lambda DNA and a minimum of 100 Units of BstXI 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

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



Stephanie Cornelio
Production Scientist
22 Jul 2019



Jay Minichiello
Packaging Quality Control Inspector
14 Aug 2019