

New England Biolabs Certificate of Analysis

Product Name: Nb.BssSI
Catalog Number: R0681T
Concentration: 100,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of pUC19 DNA in NEBuffer 3.1 incubated for 1 hour at 37°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10138016
Expiration Date: 02/2024
Storage Temperature: -20°C
Storage Conditions: 300 mM NaCl, 10 mM Tris-HCl, 1 mM DTT, 0.1 mM EDTA, 50 % Glycerol, 500 µg/ml BSA, (pH 7.4 @ 25°C)
Specification Version: PS-R0681M v1.0

Nb.BssSI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0681TVIAL	Nb.BssSI	10138015	Pass
B6003SVIAL	NEBuffer™ r3.1	10132774	Pass

Assay Name/Specification	Lot # 10138016
Protein Purity Assay (SDS-PAGE) Nb.BssSI 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 pUC19 DNA and a minimum of 20 units of Nb.BssSI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. NOTE: although no nuclease degradation is detected under these conditions, extended incubations and/or high concentrations of this enzyme may result in star activity. See the product FAQ for recommended reaction conditions for this enzyme.	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 200 units of Nb.BssSI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Measured Activity (Restriction Endonuclease)	Pass

Assay Name/Specification	Lot # 10138016
The measured activity of Nb.BssSI is complete at 100,000 units/ml and incomplete at 200,000 units/ml.	

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.



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28 Feb 2022



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28 Feb 2022