

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: 10078460
Expiration Date: 07/2022
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 | 10078459 | Pass |
| B7203SVIAL | NEBuffer™ 3.1 | 10053972 | Pass |

| Assay Name/Specification | Lot # 10078460 |
|--|----------------|
| <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 200 units of Nb.BssSI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p> | Pass |
| <p>Measured Activity (Restriction Endonuclease) The measured activity of Nb.BssSI is complete at 100,000 units/ml and incomplete at 200,000 units/ml.</p> | Pass |
| <p>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.</p> | Pass |
| <p>Protein Purity Assay (SDS-PAGE)</p> | Pass |

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|--|----------------|
| Nb.BssSI is \geq 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection. | |

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

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Production Scientist
18 Aug 2020



Josh Hersey
Packaging Quality Control Inspector
18 Aug 2020