

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: *10101983*
Expiration Date: *03/2023*
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 | 10101579 | Pass |
| B7203SVIAL | NEBuffer™ 3.1 | 10092687 | Pass |

| Assay Name/Specification | Lot # 10101983 |
|---|----------------|
| 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 |
| Measured Activity (Restriction Endonuclease) The measured activity of Nb.BssSI is complete at 100,000 units/ml and incomplete at 200,000 units/ml. | Pass |
| Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and | Pass |

| Assay Name/Specification | Lot # 10101983 |
|---|----------------|
| 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. | |

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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Production Scientist
12 Mar 2021



Michael Tonello
Packaging Quality Control Inspector
12 Mar 2021