

New England Biolabs Certificate of Analysis

Product Name: *Nb.BssSI*
Catalog Number: *R0681S*
Concentration: *20,000 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.*
Lot Number: *10032162*
Expiration Date: *12/2020*
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-R0681S v2.0*

| Nb.BssSI Component List | | | |
|-------------------------|-----------------------|------------|----------------------|
| NEB Part Number | Component Description | Lot Number | Individual QC Result |
| R0681SVIAL | Nb.BssSI | 10032163 | Pass |
| B7203SVIAL | NEBuffer™ 3.1 | 10021113 | Pass |

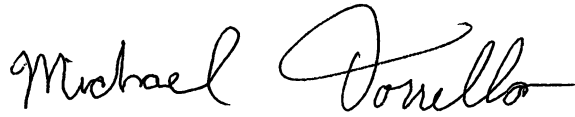
| Assay Name/Specification | Lot # 10032162 |
|--|----------------|
| <p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 200 units of Nb.BssSI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p> | Pass |
| <p>Measured Activity (Restriction Endonuclease) The measured activity of Nb.BssSI is complete at 20,000 units/ml and incomplete at 40,000 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.



Tony Spear-Alfonso
Production Scientist
26 Nov 2018



Michael Tonello
Packaging Quality Control Inspector
02 Jan 2019