

## 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.  
**Lot Number:** 10011825  
**Expiration Date:** 09/2020  
**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-R0681M v1.0

Nb.BssSI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0681TVIAL	Nb.BssSI	10011826	Pass
B7203SVIAL	NEBuffer™ 3.1	10021111	Pass

Assay Name/Specification	Lot # 10011825
<p><b>Exonuclease Activity (Radioactivity Release)</b>            A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [<sup>3</sup>H] E. coli DNA and a minimum of 200 units of Nb.BssSI incubated for 4 hours at 37°C releases &lt;0.1% of the total radioactivity.</p>	Pass
<p><b>Measured Activity (Restriction Endonuclease)</b>            The measured activity of Nb.BssSI is complete at 100,000 units/ml and incomplete at 200,000 units/ml.</p>	Pass
<p><b>Non-Specific DNase Activity (16 hour)</b>            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><b>Protein Purity Assay (SDS-PAGE)</b></p>	Pass

Assay Name/Specification	Lot # 10011825
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  
11 Oct 2018



Michael Tonello  
Packaging Quality Control Inspector  
23 Oct 2018