

## 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:** *10155329*  
**Expiration Date:** *06/2024*  
**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	10155330	Pass
B6003SVIAL	NEBuffer™ r3.1	10146823	Pass

Assay Name/Specification	Lot # 10155329
<b>Protein Purity Assay (SDS-PAGE)</b> Nb.BssSI is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	<b>Pass</b>
<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.	<b>Pass</b>
<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.	<b>Pass</b>
<b>Exonuclease Activity (Radioactivity Release)</b> A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and	<b>Pass</b>

Assay Name/Specification	Lot # 10155329
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 <0.1% of the total radioactivity.	

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

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27 Jun 2022



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