

## New England Biolabs Certificate of Analysis

**Product Name:** *Nb.BsmI*  
**Catalog Number:** *R0706S*  
**Concentration:** *10,000 U/ml*  
**Unit Definition:** *One unit is defined as the amount of enzyme required to convert 1 µg of supercoiled pBR322 DNA to open circular form in 1 hour at 65°C in a total reaction volume of 50 µl.*  
**Packaging Lot Number:** *10257697*  
**Expiration Date:** *07/2026*  
**Storage Temperature:** *-20°C*  
**Storage Conditions:** *100 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA*  
**Specification Version:** *PS-R0706S/L v2.0*

Nb.BsmI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0706SVIAL	Nb.BsmI	10246205	Pass
B6003SVIAL	NEBuffer™ r3.1	10244283	Pass

Assay Name/Specification	Lot # 10257697
<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 100 units of Nb.BsmI incubated for 4 hours at 65°C releases <0.1% of the total radioactivity.	<b>Pass</b>
<b>Non-Specific DNase Activity (16 Hour)</b> A 50 µl reaction in NEBuffer 3.1 containing 1 µg of pBR322 DNA and a minimum of 10 Units of Nb.BsmI incubated for 16 hours at 65°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	<b>Pass</b>

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

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Nancy Considine  
Production Scientist  
04 Sep 2024



Josh Hersey  
Packaging Quality Control Inspector  
09 Sep 2024