

## New England Biolabs Certificate of Analysis

**Product Name:** *Nb.BtsI*  
**Catalog Number:** *R0707S*  
**Concentration:** *10,000 U/ml*  
**Unit Definition:** *One unit is defined as the amount of enzyme required to convert 1 µg of supercoiled PhiX174 RF I DNA to open circular form in 1 hour at 37°C in a total reaction volume of 50 µl.*  
**Lot Number:** *10030086*  
**Expiration Date:** *11/2020*  
**Storage Temperature:** *-20°C*  
**Storage Conditions:** *50 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-R0707S/L v2.0*

Nb.BtsI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0707SVIAL	Nb.BtsI	10030087	Pass
B7204SVIAL	CutSmart® Buffer	10021126	Pass

Assay Name/Specification	Lot # 10030086
<b>Exonuclease Activity (Radioactivity Release)</b> A 50 µl reaction in CutSmart™ Buffer 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.BtsI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
<b>Non-Specific DNase Activity (16 Hour)</b> A 50 µl reaction in CutSmart™ Buffer containing 1 µg of PhiX174 DNA and a minimum of 10 Units of Nb.BtsI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
<b>Protein Purity Assay (SDS-PAGE)</b> Nb.BtsI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	Pass

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



Penghua Zhang  
Production Scientist  
28 Nov 2018



Michael Tonello  
Packaging Quality Control Inspector  
17 Dec 2018