

## 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:** 10014998  
**Expiration Date:** 07/2020  
**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	10014999	Pass
B7204SVIAL	CutSmart® Buffer	10010632	Pass

Assay Name/Specification	Lot # 10014998
<b>Protein Purity Assay (SDS-PAGE)</b> Nb.BtsI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	Pass
<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

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



Tony Spear-Alfonso  
Production Scientist  
12 Jun 2018



Michael Tonello  
Packaging Quality Control Inspector  
13 Jul 2018