

New England Biolabs Certificate of Analysis

Product Name: Nt.BstNBI
Catalog Number: R0607L
Concentration: 10,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg T7 DNA in 1 hour at 55°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10061307
Expiration Date: 12/2021
Storage Temperature: -20°C
Storage Conditions: 50 mM KCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA
Specification Version: PS-R0607S/L v1.0

Nt.BstNBI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0607LVIAL	Nt.BstNBI	10061306	Pass
B7203SVIAL	NEBuffer™ 3.1	10053973	Pass

Assay Name/Specification	Lot # 10061307
Protein Purity Assay (SDS-PAGE) Nt.BstNBI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	Pass
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 50 units of Nt.BstNBI incubated for 4 hours at 55°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of T7 DNA with Nt.BstNBI, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with Nt.BstNBI.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of T7 DNA and a minimum of 10 Units of Nt.BstNBI incubated for 16 hours at 55°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.

  

Anthony Francis
Production Scientist
04 Dec 2019



Josh Hersey
Packaging Quality Control Inspector
10 Jan 2020