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New England Biolabs
Certificate of Analysis

Product Name:	*Nt.BstNBI*
Catalog #:	*R0607S/L*
Concentration:	*10,000 units/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.*
Lot #:	*0401512*
Assay Date:	*12/2015*
Expiration Date:	*12/2017*
Storage Temp:	*-20°C*
Storage Buffer:	*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*
Effective Date:	*26 Oct 2015*

Assay Name/Specification (minimum release criteria)	**Lot #0401512**
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**
Protein Purity Assay (SDS-PAGE) - Nt.BstNBI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	**Pass**

Authorized by
Derek Robinson
26 Oct 2015

Inspected by
Toby Claus
09 Dec 2015

ISO 9001 Registered Quality Management
ISO 14001 Registered Environmental Management
ISO 13485 Registered Medical Devices