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New England Biolabs Certificate of Analysis

Product Name: Nt.BsmAI

Catalog #: R0121S/L

Concentration: 5,000 units/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 37°C in a total reaction volume of 50 μ l.

 Lot #:
 0031706

 Assay Date:
 06/2017

 Expiration Date:
 06/2019

 Storage Temp:
 -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-R0121S/L v1.0
Effective Date: 08 Oct 2013

Assay Name/Specification (minimum release criteria)	Lot #0031706
Exonuclease Activity (Radioactivity Release) - A 50 μl reaction in CutSmart TM Buffer containing 1 μg of a mixture of single and double-stranded [³ H] <i>E. coli</i> DNA and a minimum of 50 units of Nt.BsmAI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Non-Specific DNase Activity (16 Hour) - A 50 μl reaction in CutSmart TM Buffer containing 1 μg of pBR322 DNA and a minimum of 50 units of Nt.BsmAI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Protein Purity Assay (SDS-PAGE) - Nt.BsmAI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	Pass

^{*} The BSA in this product has been granted an EDQM "Certificate of Suitability" from the European Directorate for the Quality of Medicines (# R1-CEP-2003-204-Rev00) and has been granted a USDA Certificate for Export of Bovine Blood Plasma/Serum for Manufacture into Pharmaceutical Products.

Authorized by Derek Robinson 08 Oct 2013







Inspected by
Anthony Francis
21 Jun 2017