

New England Biolabs Certificate of Analysis

Product Name: Nt.BsmAI
Catalog Number: R0121S
Concentration: 5,000 U/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 µl.
Lot Number: 10043745
Expiration Date: 05/2021
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-R0121S/L v1.0

Nt.BsmAI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0121SVIAL	Nt.BsmAI	10043746	Pass
B7204SVIAL	CutSmart® Buffer	10042966	Pass

Assay Name/Specification	Lot # 10043745
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli 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™ 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

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



Derek Robinson
Production Scientist
08 May 2019



Josh Hersey
Packaging Quality Control Inspector
16 May 2019