

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.
Packaging Lot Number: 10117732
Expiration Date: 08/2023
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	10117731	Pass
B6004SVIAL	rCutSmart™ Buffer	10114155	Pass

Assay Name/Specification	Lot # 10117732
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
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
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.

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Production Scientist
25 Aug 2021



Michael Tonello
Packaging Quality Control Inspector
25 Aug 2021