

New England Biolabs Certificate of Analysis

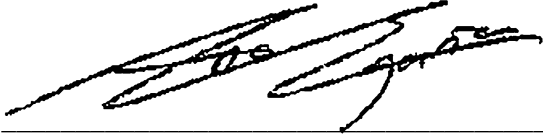
Product Name: *Nt.BsmAI*
Catalog Number: *R0121S*
Concentration: *5,000 U/ml*
Unit Definition: *One unit is defined as the amount of enzyme required to convert 1 µg of supercoiled pBR322 DNA to open circular form in 1 hour at 37°C in a total reaction volume of 50 µl.*
Packaging Lot Number: *10237750*
Expiration Date: *03/2026*
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	10236046	Pass
B6004SVIAL	rCutSmart™ Buffer	10235560	Pass

Assay Name/Specification	Lot # 10237750
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.

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Ana Egana
Production Scientist
25 Apr 2024



Michael Tonello
Packaging Quality Control Inspector
25 Apr 2024