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## New England Biolabs Certificate of Analysis

Product Name: Nt.BbvCI

Catalog #: R0632S/L

Concentration: 10,000 units/ml

Unit Definition: One unit is defined as the amount of enzyme required to convert 1 µg of supercoiled pUB DNA to open circular form in 1 hour

at 37°C in a total reaction volume of 50  $\mu$ l.

 Lot #:
 0051802

 Assay Date:
 02/2018

 Expiration Date:
 2/2020

 Storage Temp:
 -20°C

Storage Conditions: 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-R0632S/L v1.0 Effective Date: 27 Jan 2016

Assay Name/Specification (minimum release criteria)	Lot #0051802
Endonuclease Activity (Nicking) - A 50 μl reaction in CutSmart <sup>TM</sup> Buffer containing 1 μg of supercoiled pUC19 DNA and a minimum of 30 units of Nt.BbvCI incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
<b>Exonuclease Activity (Radioactivity Release)</b> - A 50 μl reaction in CutSmart <sup>TM</sup> Buffer containing 1 μg of a mixture of single and double-stranded [ <sup>3</sup> H] <i>E. coli</i> DNA and a minimum of 30 units of Nt.BbvCI 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 <sup>TM</sup> Buffer containing 1 μg of Lambda DNA and a minimum of 30 Units of Nt.BbvCI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass

<sup>\*</sup> 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 27 Jan 2016







Inspected by Jianying Luo 31 Jan 2018