

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## New England Biolabs Certificate of Analysis

Product Name: Nb.BsrDI

Catalog #: R0648S/L

Concentration: 10,000 units/ml

Unit Definition: One unit is defined as the amount of enzyme required to convert 1 µg of supercoiled pUC19 DNA to open circular form in 1

hour at 65°C in a total reaction volume of 50  $\mu$ l.

 Lot #:
 0041708

 Assay Date:
 08/2017

 Expiration Date:
 8/2019

 Storage Temp:
 -20°C

Storage Conditions: 200 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-R0648S/L v1.0
Effective Date: 20 Sep 2013

Assay Name/Specification (minimum release criteria)	Lot #0041708
Exonuclease Activity (Radioactivity Release) - 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 100 units of Nb.BsrDI incubated for 4 hours at 65°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 pUC19 DNA and a minimum of 30 units of Nb.BsrDI incubated for 16 hours at 65°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 20 Sep 2013







Inspected by Penghua Zhang 07 Aug 2017