

New England Biolabs Product Specification

Product Name: Nb.BsmI
Catalog #: R0706S/L
Concentration: 10,000 units/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 65°C in a total reaction volume of 50 µl.
Shelf Life: 24 months
Storage Temp: -20 °C
Storage Conditions: 100 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-R0706S/L v2.0
Effective Date: 04 Feb 2014

Assay Name/Specification (minimum release criteria)

Exonuclease Activity (Radioactivity Release) - A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [³H] *E. coli* DNA and a minimum of 100 units of Nb.BsmI incubated for 4 hours at 65°C releases <0.1% of the total radioactivity.

Non-Specific DNase Activity (16 Hour) - A 50 µl reaction in NEBuffer 3.1 containing 1 µg of pBR322 DNA and a minimum of 10 Units of Nb.BsmI incubated for 16 hours at 65°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.

* 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.



Derek Robinson
Director of Quality Control

Date 04 Feb 2014

