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New England Biolabs Certificate of Analysis

Product Name: SnaBI

Catalog #: R0130S/L

Concentration: 5,000 units/ml

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of T7 DNA in 1 hour at 37°C in a total reaction volume of

 $50 \mu l$.

 Lot #:
 0471608

 Assay Date:
 08/2016

 Expiration Date:
 8/2018

 Storage Temp:
 -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-R0130S/L v1.0
Effective Date: 05 Sep 2013

Assay Name/Specification (minimum release criteria)	Lot #0471608
Endonuclease Activity (Nicking) - A 50 μl reaction in CutSmart™ Buffer containing 1 μg of supercoiled PhiX174 DNA and a minimum of 5 Units of SnaBI incubated for 4 hours at 37°C results in <20% conversion to the nicked form 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] <i>E. coli</i> DNA and a minimum of 50 units of SnaBI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) - After a 20-fold over-digestion of T7 DNA DNA with SnaBI, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with SnaBI.	Pass
Non-Specific DNase Activity (16 Hour) - A 50 μl reaction in CutSmart TM Buffer containing 1 μg of T7 DNA and a minimum of 5 units of SnaBI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass

^{*} 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 05 Sep 2013







Inspected by Stephanie Cornelio 22 Jul 2016

Stephani Unetto