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New England Biolabs Certificate of Analysis

Product Name: PI-SceI R0696S/L Catalog #: Concentration: 5,000 units/ml

Unit Definition: One unit is defined as the amount of enzyme required to cleave 1 µg of pBSvdeX XmnI-linearized Control Plasmid in 3 hours at

37°C in a total reaction volume of 50 μl.

0131505 *Lot* #: 05/2015 Assay Date: 5/2017 Expiration Date: -20°C Storage Temp:

Storage Conditions: 300 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 500 μg/ml BSA

Specification Version: PS-R0696S/L v2.0 Effective Date: 26 Nov 2013

Assay Name/Specification (minimum release criteria)	Lot #0131505
Exonuclease Activity (Radioactivity Release) - A 50 μl reaction in NEBuffer PI-SceI 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 PI-SceI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) - After a 10-fold over-digestion of pBSvdeX-XmnI DNA with PI -SceI, ~75% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, ~75% can be recut with PI-SceI.	Pass
Non-Specific DNase Activity (16 Hour) - A 50 µl reaction in NEBuffer PI-SceI containing 1 µg of pBSvdeX-XmnI DNA and a minimum of 50 Units of PI-SceI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass

Authorized by Derek Robinson

26 Nov 2013 ISO 9001





Inspected by Jianying Luo 06 May 2015

^{*} 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.