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: PI-SceI
Catalog #: R0696S/L
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.

 Lot #:
 0131411

 Assay Date:
 11/2014

 Expiration Date:
 11/2016

 Storage Temp:
 -20 °C

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 #0131411
<b>Exonuclease Activity (Radioactivity Release)</b> - A 50 μl reaction in NEBuffer PI-SceI containing 1 μg of a mixture of single and double-stranded [ <sup>3</sup> 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
<b>Ligation and Recutting (Terminal Integrity)</b> - 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 $\mu$ l reaction in NEBuffer PI-SceI containing 1 $\mu$ g 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

nqa.
ISO 9001
Registered
Quality





Inspected by Jianying Luo 25 Nov 2014

<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.