

## New England Biolabs Certificate of Analysis

**Product Name:** PI-SceI  
**Catalog Number:** R0696S  
**Concentration:** 5,000 U/ml  
**Unit Definition:** One unit is defined as the amount of enzyme required to cleave 1 µg of pBSvdeX Xmnl-linearized Control Plasmid in 3 hours at 37°C in a total reaction volume of 50 µl.  
**Lot Number:** 10039626  
**Expiration Date:** 02/2021  
**Storage Temperature:** -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

PI-SceI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0696SVIAL	PI-SceI	10039627	Pass
N0422SVIAL	pBSvdeX Xmnl-linearized Control Plasmid	10036675	Pass
B9000SVIAL	BSA, Molecular Biology Grade	10041006	Pass
B0696SVIAL	NEBuffer™ PI-SceI	10022521	Pass

Assay Name/Specification	Lot # 10039626
<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] E. coli 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-Xmnl 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
<b>Non-Specific DNase Activity (16 Hour)</b> A 50 µl reaction in NEBuffer PI-SceI containing 1 µg of pBSvdeX-Xmnl 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

This product has been tested and shown to be in compliance with all specifications.



Jianying Luo  
Production Scientist  
24 Oct 2018



Josh Hersey  
Packaging Quality Control Inspector  
08 Apr 2019