

## 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 XmnI-linearized Control Plasmid in 3 hours at 37°C in a total reaction volume of 50 µl.  
**Packaging Lot Number:** 10086384  
**Expiration Date:** 10/2022  
**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	10086385	Pass
N0422SVIAL	pBSvdeX XmnI-linearized Control Plasmid	10086387	Pass
B9000SVIAL	BSA, Molecular Biology Grade	10082650	Pass
B0696SVIAL	NEBuffer™ PI-SceI	10086386	Pass

Assay Name/Specification	Lot # 10086384
<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-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
<b>Non-Specific DNase Activity (16 Hour)</b> 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

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

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Penghua Zhang  
Production Scientist  
04 Nov 2020



Michael Tonello  
Packaging Quality Control Inspector  
04 Nov 2020