

## 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:** 10056027  
**Expiration Date:** 03/2021  
**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	10056026	Pass
N0422SVIAL	pBSvdeX Xmnl-linearized Control Plasmid	10056030	Pass
B9000SVIAL	BSA, Molecular Biology Grade	10041006	Pass
B0696SVIAL	NEBuffer™ PI-SceI	10053662	Pass

Assay Name/Specification	Lot # 10056027
<p><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 &lt;0.1% of the total radioactivity.</p>	Pass
<p><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.</p>	Pass
<p><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.</p>	Pass

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



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Doreen Duquette  
Production Scientist  
01 Apr 2019



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Michael Tonello  
Packaging Quality Control Inspector  
08 Oct 2019