

New England Biolabs Certificate of Analysis

Product Name: *I-SceI*

Catalog Number: *R0694L*

Concentration: *5,000 U/ml*

Unit Definition: *One unit is defined as the amount of enzyme required to cleave 1 µg of pGPS2 NotI-linearized Control Plasmid in 1 hour at 37°C in a total reaction volume of 50 µl.*

Packaging Lot Number: *10091233*

Expiration Date: *07/2022*

Storage Temperature: *-80°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-R0694S/L v1.0*

I-SceI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0694LVIAL	I-SceI	10079890	Pass
N0420SVIAL	pGPS2 NotI-linearized Control Plasmid	10080707	Pass
B7204SVIAL	CutSmart® Buffer	10089407	Pass

Assay Name/Specification	Lot # 10091233
<p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pGPS2-NotI DNA and a minimum of 50 units of I-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
<p>Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of pGPS2-NotI DNA with I-SceI, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with I-SceI.</p>	Pass
<p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 50 units of I-SceI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p>	Pass
<p>Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of supercoiled PhiX174 DNA and</p>	Pass

Assay Name/Specification	Lot # 10091233
a minimum of 15 units of I-SceI incubated for 4 hours at 37°C results in <20% conversion to the nicked form as determined by agarose gel electrophoresis.	

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

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Production Scientist
30 Nov 2020



Michael Tonello
Packaging Quality Control Inspector
30 Nov 2020