NEW ENGLAND BioLabs Inc.
be INSPIRED drive DISCOVERY stay GENUINE
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:	*I-SceI*
Catalog Number:	*R0694S*
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:	*10144823*
Expiration Date:	*03/2024*
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**
R0694SVIAL	I-SceI	10144825	**Pass**
N0420SVIAL	pGPS2 NotI-linearized Control Plasmid	10148419	**Pass**
B6004SVIAL	rCutSmart™ Buffer	10146828	**Pass**

Assay Name/Specification	**Lot # 10144823**
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 37ºC results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	**Pass**
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 16ºC. Of these ligated fragments, >95% can be recut with I-SceI.	**Pass**
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [^{3}H] E. coli DNA and a minimum of 50 units of I-SceI incubated for 4 hours at 37ºC releases <0.1% of the total radioactivity.	**Pass**
Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of supercoiled PhiX174 DNA and	**Pass**

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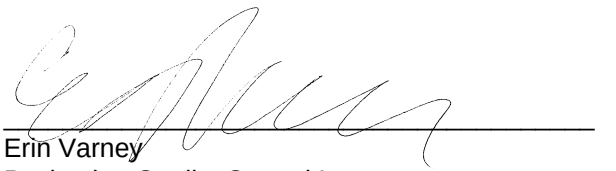
Assay Name/Specification	Lot # 10144823
a minimum of 15 units of I-SceI incubated for 4 hours at 37ºC results in <20% conversion to the nicked form as determined by agarose gel electrophoresis.	

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.

Penghua Zhang
Production Scientist
04 May 2022



Erin Varney
Packaging Quality Control Inspector
04 May 2022