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: PleI

Catalog #: R0515S/L
Concentration: 5,000 units/ml

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at 37°C in a total reaction

volume of 50 μ l.

 Lot #:
 0341309

 Assay Date:
 09/2013

 Expiration Date:
 09/2015

 Storage Temp:
 -20 °C

Storage Conditions: 50 mM KCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA

Specification Version: PS-R0515S/L v1.0
Effective Date: 02 Apr 2014

Assay Name/Specification (minimum release criteria)	Lot #0341309
Exonuclease Activity (Radioactivity Release) - A 50 μl reaction in CutSmart TM Buffer containing 1 μg of a mixture of single and double-stranded [³ H] <i>E. coli</i> DNA and a minimum of 5 units of PleI incubated for 4 hours at 37°C releases <0.3% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) - After a 2-fold over-digestion of Lambda DNA with PleI, \sim 50% 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 PleI.	Pass
Non-Specific DNase Activity (16 Hour) - A 50 μl reaction in CutSmart TM Buffer containing 1 μg of Lambda DNA and a minimum of 5 Units of PleI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Protein Purity Assay (SDS-PAGE) - PleI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	Pass

^{*} The BSA in this product has been granted an EDQM "Certificate of Suitability" from the European Directorate for the Quality of Medicines (# R1-CEP-2003-204-Rev00) and has been granted a USDA Certificate for Export of Bovine Blood Plasma/Serum for Manufacture into Pharmaceutical Products.

Authorized by Derek Robinson 02 Apr 2014







Inspected by Jenna Ware 02 Apr 2014