

New England Biolabs Certificate of Analysis

Product Name: *PleI*

Catalog Number: *R0515S*

Concentration: *5,000 U/ml*

Unit Definition: *One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in rCutSmart Buffer in 1 hour at 37°C in a total reaction volume of 50 µl.*

Packaging Lot Number: *10212882*

Expiration Date: *10/2025*

Storage Temperature: *-20°C*

Storage Conditions: *10 mM Tris-HCl, 50 mM KCl, 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml rAlbumin (pH 7.4 @ 25°C)*

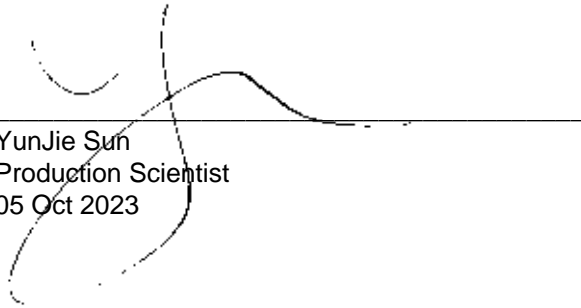
Specification Version: *PS-R0515S v2.0*

PleI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0515SVIAL	PleI	10210768	Pass
B6004SVIAL	rCutSmart™ Buffer	10204839	Pass

Assay Name/Specification	Lot # 10212882
<p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in rCutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 5 units of PleI incubated for 4 hours at 37°C releases <0.3% of the total radioactivity.</p>	Pass
<p>Ligation and Recutting (Terminal Integrity) After a 2-fold over-digestion of Lambda DNA with PleI, ~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.</p>	Pass
<p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in rCutSmart™ 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.</p>	Pass
<p>Protein Purity Assay (SDS-PAGE) PleI is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>	Pass

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.


YunJie Sun
Production Scientist
05 Oct 2023


Michael Tonello
Packaging Quality Control Inspector
18 Oct 2023