

## New England Biolabs Certificate of Analysis

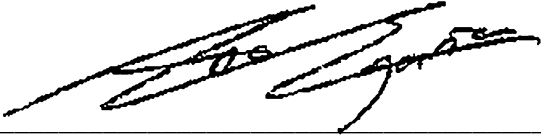
**Product Name:** *PleI*  
**Catalog Number:** *R0515S*  
**Concentration:** *5,000 U/ml*  
**Unit Definition:** *One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in rCutSmart Buffer in 1 hour at 37°C in a total reaction volume of 50 µl.*  
**Packaging Lot Number:** *10249054*  
**Expiration Date:** *06/2026*  
**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	10245485	Pass
B6004SVIAL	rCutSmart™ Buffer	10238052	Pass

Assay Name/Specification	Lot # 10249054
<b>Exonuclease Activity (Radioactivity Release)</b> A 50 µl reaction in rCutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] 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.	Pass
<b>Ligation and Recutting (Terminal Integrity)</b> 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.	Pass
<b>Non-Specific DNase Activity (16 Hour)</b> 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.	Pass
<b>Protein Purity Assay (SDS-PAGE)</b> PleI is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	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](http://www.neb.com/trademarks) for additional information.



---

Ana Egana  
Production Scientist  
24 Jun 2024



---

Michael Tonello  
Packaging Quality Control Inspector  
24 Jun 2024