

New England Biolabs Certificate of Analysis

Product Name: TseI
Catalog Number: R0591L
Concentration: 5,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg Lambda DNA in 1 hour at 65°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10093266
Expiration Date: 12/2022
Storage Temperature: -20°C
Storage Conditions: 500 mM KCl, 10 mM Tris-HCl (pH 7.5), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA
Specification Version: PS-R0591S/L v1.0

TseI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0591LVIAL	TseI	10093267	Pass
B7204SVIAL	CutSmart® Buffer	10091032	Pass

Assay Name/Specification	Lot # 10093266
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 5 Units of TseI incubated for 16 hours at 65°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	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 5 units of TseI incubated for 4 hours at 65°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 5-fold over-digestion of Lambda DNA with TseI, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 25°C. Of these ligated fragments, >95% can be recut with TseI.	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.



Pengda Zhang
Production Scientist
18 Dec 2020



Michael Tonello
Packaging Quality Control Inspector
18 Dec 2020