

New England Biolabs Certificate of Analysis

Product Name: Tsel
Catalog Number: R0591S
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.
Lot Number: 10020626
Expiration Date: 08/2020
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

Tsel Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0591SVIAL	Tsel	10020167	Pass
B7204SVIAL	CutSmart® Buffer	10015394	Pass

Assay Name/Specification	Lot # 10020626
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 Tsel 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 Tsel, >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 Tsel.	Pass
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 Tsel incubated for 16 hours at 65°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass

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



Tony Spear-Alfonso
Production Scientist
23 Jul 2018



Michael Tonello
Packaging Quality Control Inspector
31 Aug 2018