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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:	Tsel
Catalog Number:	R0591L
Concentration:	10,000 U/ml
Unit Definition:	One unit is defined as the amount of enzyme required to digest 1 μ g Lambda DNA in 1 hour at 65°C in a total reaction volume of 50 μ l.
Packaging Lot Number:	10157690
Expiration Date:	07/2024
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	
R0591LVIAL	Tsel	10157689	Pass	
B6004SVIAL	rCutSmart™ Buffer	10154051	Pass	

Assay Name/Specification	Lot # 10157690
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
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
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

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.





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