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New England Biolabs Certificate of Analysis

Product Name: TspRI
Catalog Number: R0582S
Concentration: 10,000 U/ml

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg

of Lambda DNA in 1 hour at 65°C in a total reaction volume of 50 μl.

Packaging Lot Number: 10064543
Expiration Date: 01/2022
Storage Temperature: -20°C

Storage Conditions: 200 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50%

Glycerol, 200 µg/ml BSA

Specification Version: PS-R0582S/L v1.0

TspRI Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0582SVIAL	TspRI	10064541	Pass	
B7204SVIAL	CutSmart® Buffer	10064409	Pass	

Assay Name/Specification	Lot # 10064543
Ligation and Recutting (Terminal Integrity)	Pass
After a 10-fold over-digestion of Lambda DNA with TspRI, >95% 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 TspRI.	
Non-Specific DNase Activity (16 Hour)	Pass
A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of	rass
50 Units of TspRI incubated for 16 hours at 65°C results in a DNA pattern free of	
detectable nuclease degradation as determined by agarose gel electrophoresis.	
Exonuclease Activity (Radioactivity Release)	Pass
A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and	
double-stranded [³H] E. coli DNA and a minimum of 50 units of TspRI incubated for 4 hours at 65°C releases <0.1% of the total radioactivity.	
Thous at 00 0 releases Co. 1 /6 of the total radioactivity.	
Protein Purity Assay (SDS-PAGE)	Pass
TspRI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue	
detection.	

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



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Stephani Onetto

Stephanie Cornelio Production Scientist 10 Jan 2020 Minichiello

Packaging Quality Control Inspector

10 Feb 2020