

## New England Biolabs Certificate of Analysis

Product Name: TspRI  
 Catalog #: R0582S/L  
 Concentration: 10,000 units/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.  
 Lot #: 0091510  
 Assay Date: 10/2015  
 Expiration Date: 10/2017  
 Storage Temp: -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  
 Effective Date: 17 Apr 2013

Assay Name/Specification (minimum release criteria)	Lot #0091510
<b>Exonuclease Activity (Radioactivity Release)</b> - A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] <i>E. coli</i> DNA and a minimum of 50 units of TspRI incubated for 4 hours at 65°C releases <0.1% of the total radioactivity.	Pass
<b>Ligation and Recutting (Terminal Integrity)</b> - 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.	Pass
<b>Non-Specific DNase Activity (16 Hour)</b> - A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 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.	Pass
<b>Protein Purity Assay (SDS-PAGE)</b> - TspRI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	Pass

\* The BSA in this product has been granted an EDQM "Certificate of Suitability" from the European Directorate for the Quality of Medicines (# R1-CEP-2003-204-Rev00) and has been granted a USDA Certificate for Export of Bovine Blood Plasma/Serum for Manufacture into Pharmaceutical Products.

M. W. Southworth

Authorized by  
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17 Apr 2013

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22 Oct 2015

