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## New England Biolabs Certificate of Analysis

Product Name: TspMI
Catalog Number: R0709S
Concentration: 5,000 U/mI

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

of pUCAdeno plasmid DNA in 1 hour at 75°C in a total reaction volume

of 50 μl.

Lot Number: 10054774
Expiration Date: 03/2020
Storage Temperature: -20°C

Storage Conditions: 300 mM NaCl, 20 mM Tris-HCl (pH 8.0), 1 mM DTT, 1 mM EDTA, 50%

Glycerol, 0.10% Triton X-100, 200 µg/ml BSA

Specification Version: PS-R0709S/L v1.0

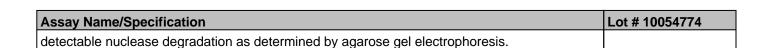
TspMI Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
R0709SVIAL	TspMI	10054775	Pass	
B7204SVIAL	CutSmart® Buffer	10050275	Pass	

Assay Name/Specification	Lot # 10054774
Endonuclease Activity (Nicking)	Pass
A 50 µl reaction in CutSmart™ Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 5 Units of TspMl incubated for 4 hours at 75°C results in <10%	
conversion to the nicked form as determined by agarose gel electrophoresis.	
Ligation and Recutting (Terminal Integrity)	Pass
After a 10-fold over-digestion of pUCAdeno DNA with TspMI, >95% of the DNA fragments	
can be ligated with T4 DNA ligase in 16 hours at 25°C. Of these ligated fragments, >75% can be recut with TspMI.	
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 TspMl incubated for 4	
hours at 75°C releases <0.1% of the total radioactivity.	
Non Specific DNose Activity (46 Hours)	Door
Non-Specific DNase Activity (16 Hour)	Pass
A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pUCAdeno DNA and a minimum	
of 5 Units of TspMI incubated for 16 hours at 75°C results in a DNA pattern free of	



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

Doreen Duquette
Production Scientist

Production Scientist 05 Sep 2019

Minichiello

Packaging Quality Control Inspector

13 Sep 2019