

## New England Biolabs Certificate of Analysis

**Product Name:** TaqI  
**Catalog Number:** R0149M  
**Concentration:** 100,000 U/ml  
**Unit Definition:** One unit is defined as the amount of enzyme required to digest 1 ·g of Lambda DNA in 1 hour at 65°C in a total reaction volume of 50 ·l.  
**Lot Number:** 10010511  
**Expiration Date:** 06/2020  
**Storage Temperature:** -20°C  
**Storage Conditions:** 300 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 500 µg/ml BSA  
**Specification Version:** PS-R0149T/M v1.0

TaqI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0149MVIAL	TaqI	10010512	Pass
B7204SVIAL	CutSmart® Buffer	3081804	Pass

Assay Name/Specification	Lot # 10010511
<b>Non-Specific DNase Activity (16 Hour)</b> A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA DNA and a minimum of 200 Units of TaqI 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>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] E. coli DNA and a minimum of 200 units of TaqI incubated for 4 hours at 65°C releases <0.1% of the total radioactivity.	Pass
<b>Ligation and Recutting (Terminal Integrity)</b> After a 20-fold over-digestion of Lambda DNA DNA with TaqI, >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 TaqI.	Pass

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



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Jianying Luo  
Production Scientist  
08 Jun 2018



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Michael Tonello  
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26 Jun 2018