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New England Biolabs Certificate of Analysis

Product Name: TaqaI

Catalog #: R0149T/M
Concentration: 100,000 units/ml

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 \(\alpha g \) of Lambda DNA in 1 hour at 65°C in a total reaction

volume of 50 αl .

 Lot #:
 0541609

 Assay Date:
 09/2016

 Expiration Date:
 09/2018

 Storage Temp:
 -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

Effective Date: 28 Jun 2013

Assay Name/Specification (minimum release criteria)	Lot #0541609
Exonuclease Activity (Radioactivity Release) - A 50 μl reaction in CutSmart TM Buffer containing 1 μg of a mixture of single and double-stranded [³ H] <i>E. coli</i> DNA and a minimum of 200 units of TaqαI incubated for 4 hours at 65°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) - After a 20-fold over-digestion of Lambda DNA DNA with $Taq\alpha I$, >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 $Taq\alpha I$.	Pass
Non-Specific DNase Activity (16 Hour) - A 50 μl reaction in CutSmart TM Buffer containing 1 μg of Lambda DNA DNA and a minimum of 200 Units of TaqαI incubated for 16 hours at 65°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	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.

Authorized by Derek Robinson 28 Jun 2013







Inspected by Jianying Luo 14 Sep 2016