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New England Biolabs Certificate of Analysis

Product Name: T4 PDG (T4 Endonuclease V)

Catalog #: M0308S/L
Concentration: 10,000 units/ml

Unit Definition: One unit is defined as the amount of enzyme that catalyzes the conversion of 0.5 µg of UV-irradiated supercoiled pUC19 DNA

to >95% nicked plasmid in a total reaction volume of 20 μ l in 30 minutes at 37°C. Nicking is assessed by agarose gel

electrophoresis. Irradiated plasmid contains an average of 3-5 pyrimidine dimers.

Lot #:0051804Assay Date:04/2018Expiration Date:04/2020Storage Temp:-20°C

Storage Conditions: 10 mM Tris-HCl, 250 mM NaCl, 1 mM DTT, 0.1 mM EDTA, 50 % Glycerol, 0.15 % Triton® X-100, (pH 7.4 @ 25°

 C_{j}

Specification Version: PS-M0308S/L v1.0

Effective Date: 11 Jun 2018

Assay Name/Specification (minimum release criteria)	Lot #0051804
Exonuclease Activity (Radioactivity Release) - A 50 μ l reaction in NEBuffer 2.1 containing 1 μ g of a mixture of single and double-stranded [3 H] <i>E. coli</i> DNA and a minimum of 30 units of T4 PDG (T4 Endonuclease V) incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Non-Specific DNase Activity (16 Hour) - A 50 ul reaction in NEBuffer 2.1 containing 1 ug of Lambda-HindIII DNA and a minimum of 100 units of T4 PDG (T4 Endonuclease V) incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Protein Purity Assay (SDS-PAGE) - T4 PDG (T4 Endonuclease V) is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass

Authorized by Derek Robinson 11 Jun 2018







Inspected by Lauren Higgins 01 Apr 2018

Lauren Higgins