

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## New England Biolabs Certificate of Analysis

Product Name: T4 PDG (T4 Endonuclease V)

Catalog Number: M0308S
Concentration: 10,000 U/ml

Unit Definition: One unit is defined as the amount of enzyme that catalyzes the

conversion of 0.5  $\mu$ g of UV-irradiated supercoiled pUC19 DNA to >95% nicked plasmid in a total reaction volume of 20  $\mu$ l in 30 minutes at 37°C. Nicking is assessed by agarose gel electrophoresis. Irradiated

plasmid contains an average of 3-5 pyrimidine dimers.

Packaging Lot Number: 10059869
Expiration Date: 08/2021
Storage Temperature: -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)

Specification Version: PS-M0308S/L v1.0

T4 PDG (T4 Endonuclease V) Component List			
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result
M0308SVIAL	T4 PDG (T4 Endonuclease V)	10056716	Pass
B9001SVIAL	Purified BSA	10014762	Pass
B0308SVIAL	T4 PDG Reaction Buffer	0011811	Pass

Assay Name/Specification	Lot # 10059869
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
Exonuclease Activity (Radioactivity Release) A 50 μl reaction in NEBuffer 2.1 containing 1 μg of a mixture of single and double-stranded [ ³H] E. coli 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
Protein Purity Assay (SDS-PAGE) T4 PDG (T4 Endonuclease V) is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass



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

Tony Spear-Alfonso Production Scientist

12 Sep 2018

Michael Tonello

Packaging Quality Control Inspector

16 Dec 2019

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