

## 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 µg of UV-irradiated supercoiled pUC19 DNA to >95% nicked plasmid in a total reaction volume of 20 µl 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:** 10096931  
**Expiration Date:** 11/2022  
**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			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0308SVIAL	T4 PDG (T4 Endonuclease V)	10096932	Pass
B9001SVIAL	Purified BSA	10059427	Pass
B0308SVIAL	T4 PDG Reaction Buffer	10096933	Pass

Assay Name/Specification	Lot # 10096931
<b>Non-Specific DNase Activity (16 Hour)</b> A 50 µl reaction in NEBuffer 2.1 containing 1 µg 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
<b>Exonuclease Activity (Radioactivity Release)</b> A 50 µl reaction in NEBuffer 2.1 containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] 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
<b>Protein Purity Assay (SDS-PAGE)</b> T4 PDG (T4 Endonuclease V) is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	Pass

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit [www.neb.com/trademarks](http://www.neb.com/trademarks) for additional information.

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25 Jan 2021

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25 Jan 2021