

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: 10252417
Expiration Date: 06/2026
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 v2.0

T4 PDG (T4 Endonuclease V) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0308SVIAL	T4 PDG (T4 Endonuclease V)	10238738	Pass
B9200SVIAL	Recombinant Albumin, Molecular Biology G	10198642	Pass
B0308SVIAL	T4 PDG Reaction Buffer	10238737	Pass

Assay Name/Specification	Lot # 10252417
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer™ r2.1 containing 1 µg of a mixture of single and double-stranded [³ 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
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in NEBuffer™ r2.1 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
Protein Purity Assay (SDS-PAGE) 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.

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Jamie Souza
Production Scientist
18 Jul 2024



Michael Tonello
Packaging Quality Control Inspector
07 Aug 2024