

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.
Lot Number: 10023165
Expiration Date: 09/2020
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

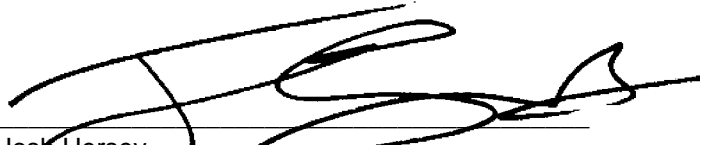
T4 PDG (T4 Endonuclease V) Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
M0308SVIAL	T4 PDG (T4 Endonuclease V)	10023164	Pass
B9001SVIAL	Purified BSA	10014762	Pass
B0308SVIAL	T4 PDG Reaction Buffer	0011711	Pass

Assay Name/Specification	Lot # 10023165
Non-Specific DNase Activity (16 Hour) 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
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 2.1 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
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.



Tony Spear-Alfonso
Production Scientist
12 Sep 2018



Josh Hersey
Packaging Quality Control Inspector
11 Oct 2018