

New England Biolabs Certificate of Analysis

Product Name: T4 Phage beta-glucosyltransferase
Catalog Number: M0357L
Concentration: 10,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to protect 0.5 µg T4gt-DNA against cleavage by MfeI restriction endonuclease.
Lot Number: 10025417
Expiration Date: 09/2020
Storage Temperature: -20°C
Storage Conditions: 200 mM NaCl, 20 mM KPO₄, 0.25 mM DTT, 0.1 mM EDTA, 50% Glycerol, (pH 7.0 @ 25°C)
Specification Version: PS-M0357S/L v1.0

T4 Phage beta-glucosyltransferase Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
S2200SVIAL	Uridine Diphosphate Glucose, 2 mM	10025418	Pass
M0357LVIAL	T4 Phage β-glucosyltransferase (T4-BGT)	10021615	Pass
B7004SVIAL	NEBuffer™ 4	10012689	Pass

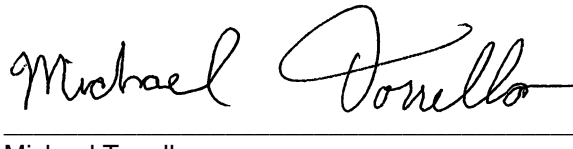
Assay Name/Specification	Lot # 10025417
Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart® Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 100 units of T4 Phage β-glucosyltransferase (T4-BGT) incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 100 units of T4 Phage β-glucosyltransferase (T4-BGT) 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 CutSmart® Buffer containing 1 µg of Lambda DNA and a minimum of 100 units of T4 Phage β-glucosyltransferase (T4-BGT) incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass

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





Tony Spear-Alfonso
Production Scientist
19 Jun 2018



Michael Tonello
Packaging Quality Control Inspector
23 Oct 2018