

## New England Biolabs Certificate of Analysis

**Product Name:** T4 Phage beta-glucosyltransferase  
**Catalog Number:** M0357S  
**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:** 10010998  
**Expiration Date:** 06/2020  
**Storage Temperature:** -20°C  
**Storage Conditions:** 200 mM NaCl, 20 mM KPO<sub>4</sub>, 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	10014929	Pass
M0357SVIAL	T4 Phage β-glucosyltransferase (T4-BGT)	10010999	Pass
B7004SVIAL	NEBuffer™ 4	0181710	Pass

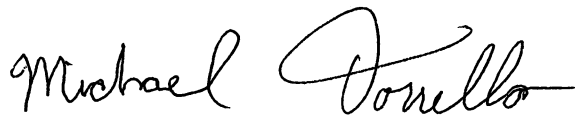
Assay Name/Specification	Lot # 10010998
<p><b>Endonuclease Activity (Nicking)</b>            A 50 µl reaction in CutSmart® Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 100 units of T4 Phage β-glucosyltransferase (T4-BGT) incubated for 4 hours at 37°C results in &lt;10% conversion to the nicked form as determined by agarose gel electrophoresis.</p>	Pass
<p><b>Exonuclease Activity (Radioactivity Release)</b>            A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [<sup>3</sup>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 &lt;0.1% of the total radioactivity.</p>	Pass
<p><b>Non-Specific DNase Activity (16 Hour)</b>            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.</p>	Pass

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





Mala Samaranayake  
Production Scientist  
05 Jun 2018



Michael Tonello  
Packaging Quality Control Inspector  
16 Jul 2018