

New England Biolabs Certificate of Analysis

Product Name: Bmtl
Catalog Number: R0658S
Concentration: 10,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of pXba in 1 hour at 37°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10161348
Expiration Date: 08/2024
Storage Temperature: -20°C
Storage Conditions: 300 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 500 µg/ml BSA
Specification Version: PS-R0658S/L v1.0

Bmtl Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0658SVIAL	Bmtl	10161347	Pass
B6003SVIAL	NEBuffer™ r3.1	10146825	Pass

Assay Name/Specification	Lot # 10161348
<p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 50 units of Bmtl incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p>	Pass
<p>Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of pXba DNA with Bmtl, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with Bmtl.</p>	Pass
<p>Non-Specific DNase Activity (16 hour) A 50 µl reaction in NEBuffer 3.1 containing 1 µg of pXba DNA and a minimum of 10 units of Bmtl incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. NOTE: although no nuclease degradation is detected under these conditions, extended incubations and/or high concentrations of this enzyme may result in star activity. See the product FAQ for recommended reaction conditions for this enzyme.</p>	Pass
<p>Protein Purity Assay (SDS-PAGE)</p>	Pass

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BmtI is $\geq 95\%$ pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	

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

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Penghua Zhang
Production Scientist
09 Sep 2022



Michael Tonello
Packaging Quality Control Inspector
09 Sep 2022