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## New England Biolabs Certificate of Analysis

Product Name: Bmtl-HF®
Catalog Number: R3658L
Concentration: 20,000 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.

Lot Number: 10046395
Expiration Date: 04/2021
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-R3658S/L v1.0

Bmtl-HF® Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
R3658LVIAL	BmtI-HF®	10041280	Pass	
B7204SVIAL	CutSmart® Buffer	10042966	Pass	
B7024SVIAL	Gel Loading Dye, Purple (6X)	10042958	Pass	

Assay Name/Specification	Lot # 10046395
Exonuclease Activity (Radioactivity Release) A 50 μl reaction in CutSmart™ Buffer containing 1 μg of a mixture of single and double-stranded [ ³H] E. coli DNA and a minimum of 200 units of Bmtl-HF™ incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
<b>Ligation and Recutting (Terminal Integrity)</b> After a 20-fold over-digestion of pXba DNA with Bmtl-HF™, >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-HF™.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pXba DNA and a minimum of 100 Units of Bmtl-HF™ 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.



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Jianying Luo Production Scientist 05 Apr 2019 Jay Minichiello

Packaging Quality Control Inspector

31 May 2019