

## New England Biolabs Certificate of Analysis

**Product Name:** BmtI-HF®  
**Catalog Number:** R3658S  
**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.  
**Packaging Lot Number:** 10146066  
**Expiration Date:** 03/2023  
**Storage Temperature:** -80°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 v2.0

BmtI-HF® Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R3658SVIAL	BmtI-HF®	10146065	Pass
B7024AVIAL	Gel Loading Dye, Purple (6X)	10138405	Pass
B6004SVIAL	rCutSmart™ Buffer	10143289	Pass


Assay Name/Specification	Lot # 10146066
<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 200 units of BmtI-HF™ incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
<b>Non-Specific DNase Activity (16 Hour)</b> A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pXba DNA and a minimum of 100 Units of BmtI-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
<b>Ligation and Recutting (Terminal Integrity)</b> After a 20-fold over-digestion of pXba DNA with BmtI-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 BmtI-HF™.	Pass

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

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15 Apr 2022



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