

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: 10158564
Expiration Date: 07/2023
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®	10158563	Pass
B7024AVIAL	Gel Loading Dye, Purple (6X)	10156427	Pass
B6004SVIAL	rCutSmart™ Buffer	10156428	Pass

Assay Name/Specification	Lot # 10158564
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 200 units of BmtI-HF™ 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 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
Ligation and Recutting (Terminal Integrity) 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.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.



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10 Aug 2022



Erin Varney
Packaging Quality Control Inspector
10 Aug 2022