

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: 10076539
Expiration Date: 12/2021
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

BmtI-HF [®] Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R3658SVIAL	BmtI-HF [®]	10062723	Pass
B7204SVIAL	CutSmart [®] Buffer	10075570	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10074634	Pass

Assay Name/Specification	Lot # 10076539
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
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
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

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



Penghua Zhang
Production Scientist
14 Jul 2020



Josh Hersey
Packaging Quality Control Inspector
14 Jul 2020