

New England Biolabs Certificate of Analysis

Product Name: BtsIMutI
Catalog Number: R0664S
Concentration: 1,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of pUC19 DNA in 1 hour at 55°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10173013
Expiration Date: 12/2024
Storage Temperature: -20°C
Storage Conditions: 50 mM KCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA
Specification Version: PS-R0664S v1.0

BtsIMutI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0664SVIAL	BtsIMutI	10173012	Pass
B6004SVIAL	rCutSmart™ Buffer	10173661	Pass

Assay Name/Specification	Lot # 10173013
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 5 units of BtsIMutI incubated for 4 hours at 55°C releases <0.5% of the total radioactivity.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pUC19 DNA and a minimum of 5 units of BtsIMutI incubated for 16 hours at 55°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 5-fold over-digestion of pUC19 DNA with BtsIMutI, ~50% 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 BtsIMutI.	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.


YunJie Sun
Production Scientist
04 Jan 2023


Michael Tonello

Michael Tonello
Packaging Quality Control Inspector
05 Jan 2023