

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: 10104556
Expiration Date: 03/2023
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	10102172	Pass
B6004SVIAL	rCutSmart™ Buffer	10103711	Pass

Assay Name/Specification	Lot # 10104556
<p>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.</p>	Pass
<p>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 5 units of BtsIMutI incubated for 4 hours at 55°C releases <0.5% of the total radioactivity.</p>	Pass
<p>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.</p>	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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12 May 2021



Michael Tonello
Packaging Quality Control Inspector
12 May 2021