

New England Biolabs Certificate of Analysis

Product Name: *BtsIMutI*
Catalog #: *R0664S*
Concentration: *1,000 units/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.*
Lot #: *0011308*
Assay Date: *08/2013*
Expiration Date: *08/2015*
Storage Temp: *-20 °C*
Storage Buffer: *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*
Effective Date: *26 Jul 2013*

Assay Name/Specification (minimum release criteria)	Lot #0011308
Exonuclease Activity (Radioactivity Release) - A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³ H] <i>E. coli</i> DNA and a minimum of 5 units of BtsIMutI incubated for 4 hours at 55°C releases <0.5% of the total radioactivity.	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
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

* The BSA in this product has been granted an EDQM "Certificate of Suitability" from the European Directorate for the Quality of Medicines (# R1-CEP-2003-204-Rev00) and has been granted a USDA Certificate for Export of Bovine Blood Plasma/Serum for Manufacture into Pharmaceutical Products.



Authorized by
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26 Jul 2013



Inspected by
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21 Aug 2013

