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New England Biolabs
Certificate of Analysis

Product Name:	*MwoI*
Catalog #:	*R0573S/L*
Concentration:	*5,000 units/ml*
Unit Definition:	*One unit is defined as the amount of enzyme required to digest 1 μg of Lambda DNA in 1 hour at 60°C in a total reaction volume of 50 μl.*
Lot #:	*0201609*
Assay Date:	*09/2016*
Expiration Date:	*09/2018*
Storage Temp:	*-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-R0573S/L v2.0*
Effective Date:	*01 Apr 2015*

Assay Name/Specification (minimum release criteria)	Lot #0201609
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 50 units of MwoI incubated for 4 hours at 60°C releases <0.3% of the total radioactivity.	**Pass**
Ligation and Recutting (Terminal Integrity) - After a 10-fold over-digestion of Lambda DNA with MwoI, >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 MwoI.	**Pass**
Non-Specific DNase Activity (16 Hour) - A 50 μl reaction in CutSmart™ Buffer containing 1 μg of Lambda DNA and a minimum of 50 Units of MwoI incubated for 16 hours at 60°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	**Pass**
Protein Purity Assay (SDS-PAGE) - MwoI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	**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
Derek Robinson
01 Apr 2015

Inspected by
Theresa Petronzio
22 Sep 2016

nqa. ISO 9001 Registered Quality Management

nqa. ISO 14001 Registered Environmental Management

nqa. ISO 13485 Registered Medical Devices