

## New England Biolabs Certificate of Analysis

**Product Name:** MboII  
**Catalog Number:** R0148L  
**Concentration:** 5,000 U/ml  
**Unit Definition:** One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA (dam-) in 1 hour at 37°C in a total reaction volume of 50 µl.  
**Packaging Lot Number:** 10069401  
**Expiration Date:** 03/2022  
**Storage Temperature:** -20°C  
**Storage Conditions:** 250 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 0.15% Triton X-100, 200 µg/ml BSA  
**Specification Version:** PS-R0148S/L v1.0

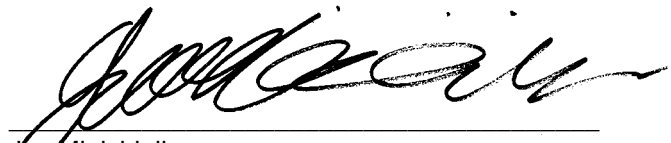
MboII Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0148LVIAL	MboII	10069398	Pass
B7204SVIAL	CutSmart® Buffer	10071078	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10065747	Pass

Assay Name/Specification	Lot # 10069401
<b>Exonuclease Activity (Radioactivity Release)</b> A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] E. coli DNA and a minimum of 5 units of MboII incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
<b>Ligation and Recutting (Terminal Integrity)</b> After a 10-fold over-digestion of Lambda dam- DNA with MboII, ~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 MboII.	Pass
<b>Non-Specific DNase Activity (16 Hour)</b> A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda dam- DNA and a minimum of 5 Units of MboII incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
<b>Protein Purity Assay (SDS-PAGE)</b>	Pass

Assay Name/Specification	Lot # 10069401
Mboll is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	

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

  
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Penghua Zhang  
Production Scientist  
22 Apr 2020

  
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Jay Minichiello  
Packaging Quality Control Inspector  
22 Apr 2020