

New England Biolabs Certificate of Analysis

Product Name: MboII
Catalog Number: R0148S
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: 10129260
Expiration Date: 11/2023
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
R0148SVIAL	MboII	10129259	Pass
B7024AVIAL	Gel Loading Dye, Purple (6X)	10131976	Pass
B6004SVIAL	rCutSmart™ Buffer	10131975	Pass

Assay Name/Specification	Lot # 10129260
Ligation and Recutting (Terminal Integrity) 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
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 MboII incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Protein Purity Assay (SDS-PAGE) MboII is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	Pass
Non-Specific DNase Activity (16 Hour) 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	Pass

Assay Name/Specification	Lot # 10129260
free of detectable nuclease degradation as determined by agarose gel electrophoresis.	

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.



Penghua Zhang
Production Scientist
04 Mar 2022



Josh Hersey
Packaging Quality Control Inspector
04 Mar 2022