

New England Biolabs Certificate of Analysis

Product Name: MboI
Catalog Number: R0147M
Concentration: 25,000 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: 10064557
Expiration Date: 01/2022
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-R0147T/M v1.0

MboI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0147MVIAL	MboI	10064556	Pass
B7204SVIAL	CutSmart® Buffer	10064409	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10064412	Pass

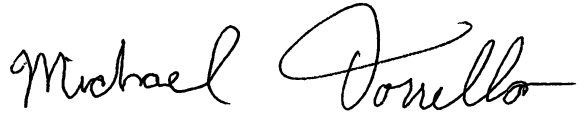
Assay Name/Specification	Lot # 10064557
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda dam- DNA with MboI, >95% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with MboI.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda dam- DNA and a minimum of 50 Units of MboI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 50 units of MboI incubated for 4 hours at 37°C results in <20% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
Exonuclease Activity (Radioactivity Release)	Pass

Assay Name/Specification	Lot # 10064557
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 MboI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	

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



Anthony Francis
Production Scientist
13 Jan 2020



Michael Tonello
Packaging Quality Control Inspector
10 Feb 2020