

New England Biolabs Certificate of Analysis


Product Name: MboI
Catalog Number: R0147S
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.
Lot Number: 10036099
Expiration Date: 02/2021
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-R0147S/L v1.0

MboI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0147SVIAL	MboI	10036100	Pass
B7204SVIAL	CutSmart® Buffer	10031566	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10021142	Pass

Assay Name/Specification	Lot # 10036099
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) 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.	Pass
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	Pass

Assay Name/Specification	Lot # 10036099
minimum of 50 Units of Mbol incubated for 16 hours at 37°C results in a DNA pattern 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.



Doreen Duquette
Production Scientist
07 Feb 2019



Michael Tonello
Packaging Quality Control Inspector
28 Feb 2019