

New England Biolabs Certificate of Analysis

Product Name: *Mboll*

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: *10069400*

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*

MbolI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0148SVIAL	MbolI	10069399	Pass
B7204SVIAL	CutSmart® Buffer	10075569	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10074634	Pass

Assay Name/Specification	Lot # 10069400
<p>Protein Purity Assay (SDS-PAGE) MbolI is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.</p>	Pass
<p>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 MbolI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.</p>	Pass
<p>Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda dam- DNA with MbolI, ~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 MbolI.</p>	Pass
<p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and</p>	Pass

Assay Name/Specification	Lot # 10069400
double-stranded [³ H] E. coli DNA and a minimum of 5 units of MbolI 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.



Penghua Zhang
Production Scientist
01 Jul 2020



Michael Tonello
Packaging Quality Control Inspector
01 Jul 2020