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New England Biolabs Certificate of Analysis

Product Name: Msll

Catalog Number: R0571L

Concentration: 10,000 U/ml

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg

of Lambda DNA in 1 hour at 37°C in a total reaction volume of 50 μl.

Packaging Lot Number: 10131344 Expiration Date: 12/2023 Storage Temperature: -20°C

Storage Conditions: 100 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-R0571S/L v1.0

MsII Component List				
NEB Part Number	Component Description	Lot Number	Individual QC Result	
R0571LVIAL	MsII	10131342	Pass	
B6004SVIAL	rCutSmart™ Buffer	10128416	Pass	

Assay Name/Specification	Lot # 10131344
Exonuclease Activity (Radioactivity Release) A 50 μl reaction in CutSmart™ Buffer containing 1 μg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 100 units of MsII incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 100 Units of Msll incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Ligation and Recutting (Terminal Integrity) After a 50-fold over-digestion of Lambda DNA with MsII, >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 MsII.	Pass

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.



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Pengha Zhang Production Scientist 19 Jan 2022

Michael Tonello

Packaging Quality Control Inspector

19 Jan 2022

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