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## New England Biolabs Certificate of Analysis

Product Name: Mwol
Catalog Number: R0573L
Concentration: 5,000 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 60°C in a total reaction volume of 50 μl.

Lot Number: 10052604
Expiration Date: 08/2021
Storage Temperature: -20°C

Storage Conditions: 300 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50%

Glycerol, 500 µg/ml BSA

Specification Version: PS-R0573S/L v2.0

Mwol Component List				
<b>NEB Part Number</b>	Component Description	Lot Number	Individual QC Result	
R0573LVIAL	Mwol	10052605	Pass	
B7204SVIAL	CutSmart® Buffer	10046087	Pass	

Assay Name/Specification	Lot # 10052604
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 50 units of Mwol incubated for 4 hours at 60°C releases <0.3% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with Mwol, >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 Mwol.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 50 Units of Mwol incubated for 16 hours at 60°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Protein Purity Assay (SDS-PAGE) Mwol is >95% pure as determined by SDS PAGE analysis using Coomassie Blue detection.	Pass

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



R0573L / Lot: 10052604 Page 1 of 2



09 Aug 2019

Michael Tonello

Packaging Quality Control Inspector 26 Aug 2019