

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

New England Biolabs Certificate of Analysis

Product Name: Msel
Catalog Number: R0525L
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: 10131077
Expiration Date: 12/2023
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-R0525S/L v1.0

Msel Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0525LVIAL	Msel	10131076	Pass
B7024AVIAL	Gel Loading Dye, Purple (6X)	10127723	Pass
B6004SVIAL	rCutSmart™ Buffer	10130599	Pass

Assay Name/Specification	Lot # 10131077
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with Msel, >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 Msel.	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 Msel incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation 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 [³H] E. coli DNA and a minimum of 30 units of Msel incubated for 4 hours at 37°C releases <0.2% of the total radioactivity.	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.



R0525L / Lot: 10131077 Page 1 of 2



Penghua Zhang Production Scientist 04 Jan 2022 Michael Tonello

Packaging Quality Control Inspector 04 Jan 2022

R0525L / Lot: 10131077

Page 2 of 2