

## New England Biolabs Certificate of Analysis

**Product Name:** *MslI*  
**Catalog Number:** *R0571S*  
**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:** *10069389*  
**Expiration Date:** *01/2022*  
**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*

| MslI Component List |                       |            |                      |
|---------------------|-----------------------|------------|----------------------|
| NEB Part Number     | Component Description | Lot Number | Individual QC Result |
| R0571SVIAL          | MslI                  | 10063615   | Pass                 |
| B7204SVIAL          | CutSmart® Buffer      | 10071077   | Pass                 |

| Assay Name/Specification  | Lot # 10069389 |
|---|----------------|
| <b>Exonuclease Activity (Radioactivity Release)</b><br>A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] E. coli DNA and a minimum of 100 units of MslI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.    | Pass           |
| <b>Ligation and Recutting (Terminal Integrity)</b><br>After a 50-fold over-digestion of Lambda DNA with MslI, >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 MslI.   | Pass           |
| <b>Non-Specific DNase Activity (16 Hour)</b><br>A 50 µl reaction in CutSmart™ Buffer containing 1 µg of Lambda DNA and a minimum of 100 Units of MslI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. | Pass           |

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



Penghua Zhang  
Production Scientist  
13 Apr 2020



Jay Minichiello  
Packaging Quality Control Inspector  
13 Apr 2020