

New England Biolabs Certificate of Analysis

Product Name: MseI
Catalog Number: R0525S
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: 10064256
Expiration Date: 01/2022
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

MseI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0525SVIAL	MseI	10064254	Pass
B7204SVIAL	CutSmart® Buffer	10064411	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10059230	Pass

Assay Name/Specification	Lot # 10064256
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 30 units of MseI incubated for 4 hours at 37°C releases <0.2% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with MseI, >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 MseI.	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 MseI 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.

Stephanie Cornelio

Stephanie Cornelio
Production Scientist
15 Jan 2020

Jay Minichiello

Jay Minichiello
Packaging Quality Control Inspector
27 Feb 2020