

New England Biolabs Certificate of Analysis

Product Name: MseI
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.
Lot Number: 10023118
Expiration Date: 10/2020
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

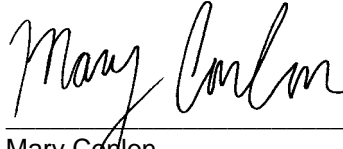
MseI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0525LVIAL	MseI	10023119	Pass
B7204SVIAL	CutSmart® Buffer	10018442	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10018415	Pass

Assay Name/Specification	Lot # 10023118
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.



Tony Spear-Alfonso
Production Scientist
07 Sep 2018



Mary Conlon
Packaging Quality Control Inspector
11 Oct 2018