

New England Biolabs Certificate of Analysis

Product Name: MspA1I
Catalog Number: R0577L
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: 10065791
Expiration Date: 02/2022
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-R0577S/L v1.0

MspA1I Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0577LVIAL	MspA1I	10065792	Pass
B7204SVIAL	CutSmart® Buffer	10064409	Pass

Assay Name/Specification	Lot # 10065791
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 MspA1I 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 [³ H] E. coli DNA and a minimum of 50 units of MspA1I incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) After a 10-fold over-digestion of Lambda DNA with MspA1I, >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 MspA1I.	Pass

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

Stephanie Cornelio

Stephanie Cornelio
Production Scientist
30 Jan 2020

Jay Minichiello

Jay Minichiello
Packaging Quality Control Inspector
11 Feb 2020