

New England Biolabs Certificate of Analysis

Product Name: MscI
Catalog Number: R0534S
Concentration: 5,000 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: 10031339
Expiration Date: 12/2020
Storage Temperature: -20°C
Storage Conditions: 150 mM KCl, 10 mM Tris-HCl, 1 mM DTT, 0.1 mM EDTA, 50 % Glycerol, 200 µg/ml BSA, 0.05 % Triton®X-100, (pH 7.4 @ 25°C)
Specification Version: PS-R0534S/L v3.0

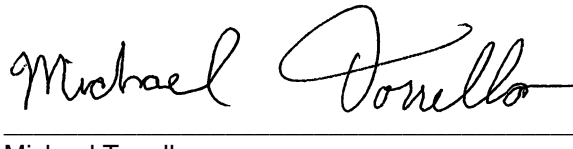
MscI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0534SVIAL	MscI	10031340	Pass
B7204SVIAL	CutSmart® Buffer	10021126	Pass

Assay Name/Specification	Lot # 10031339
<p>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 50 units of MscI incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.</p>	Pass
<p>Ligation and Recutting (Terminal Integrity) After a 20-fold over-digestion of Lambda DNA with MscI, >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 MscI.</p>	Pass
<p>Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart® Buffer containing 1 µg of Lambda DNA and a minimum of 25 units of MscI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.</p>	Pass
<p>Protein Purity Assay (SDS-PAGE) MscI is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>	Pass

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



Tony Spear-Alfonso
Production Scientist
10 Dec 2018



Michael Tonello
Packaging Quality Control Inspector
12 Dec 2018