

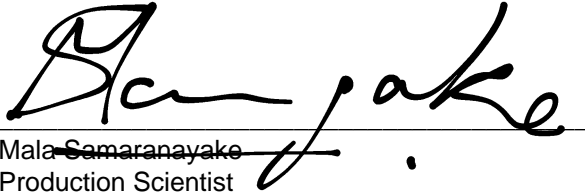
## New England Biolabs Certificate of Analysis

**Product Name:** McrBC  
**Catalog Number:** M0272S  
**Concentration:** 10,000 U/ml  
**Unit Definition:** One unit is defined as the amount of enzyme required to cleave 1 µg of a plasmid containing multiple McrBC sites in 1 hour at 37°C in a total reaction volume of 50 µl.  
**Packaging Lot Number:** 10069482  
**Expiration Date:** 09/2020  
**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-M0272S/L v1.0

McrBC Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
N0419SVIAL	GTP	10065152	Pass
N0418SVIAL	McrBC Substrate	0201905	Pass
M0272SVIAL	McrBC	10069483	Pass
B9000SVIAL	BSA, Molecular Biology Grade	10057616	Pass
B7002SVIAL	NEBuffer™ 2	10061303	Pass

Assay Name/Specification	Lot # 10069482
<b>Non-Specific DNase Activity (16 Hour)</b> A 50 µl reaction in NEBuffer 2 containing 1 µg of Lambda-HindIII DNA and a minimum of 30 units of McrBC incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
<b>Exonuclease Activity (Radioactivity Release)</b> A 50 µl reaction in NEBuffer 2 containing 1 µg of a mixture of single and double-stranded [ <sup>3</sup> H] E. coli DNA and a minimum of 30 units of McrBC incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
<b>Endonuclease Activity (Nicking)</b> A 50 µl reaction in NEBuffer 2 containing 1 µg of supercoiled PhiX174 DNA and a minimum of 50 units of McrBC incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass

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



Mala Samaranayake  
Production Scientist  
06 Mar 2020



Josh Hersey  
Packaging Quality Control Inspector  
19 Mar 2020