

*be* INSPIRED *drive* DISCOVERY *stay* GENUINE

240 County Road Ipswich, MA 01938-2723 Tel 978-927-5054 Fax 978-921-1350 www.neb.com info@neb.com

## 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:	10088660
Expiration Date:	05/2021
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	10082606	Pass	
N0418SVIAL	McrBC Substrate	0201905	Pass	
M0272SVIAL	McrBC	10088659	Pass	
B9000SVIAL	BSA, Molecular Biology Grade	10082650	Pass	
B7002SVIAL	NEBuffer™ 2	10074105	Pass	

Assay Name/Specification	Lot # 10088660
<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 $\mu$ l reaction in NEBuffer 2 containing 1 $\mu$ g 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





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

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Mala-Samaranayake Production Scientist 19 Nov 2020

Michael Tonello Packaging Quality Control Inspector 19 Nov 2020

