

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: | 10103758 |
| Expiration Date: | 09/2021 |
| 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 | 10101776 | Pass | |
| N0418SVIAL | McrBC Substrate | 10092215 | Pass | |
| M0272SVIAL | McrBC | 10103759 | Pass | |
| B9000SVIAL | BSA, Molecular Biology Grade | 10089409 | Pass | |
| B7002SVIAL | NEBuffer™ 2 | 10097265 | Pass | |

| Assay Name/Specification | Lot # 10103758 |
|---|----------------|
| Non-Specific DNase Activity (16 Hour) A 50 μ I reaction in NEBuffer 2 containing 1 μ g 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 |
| Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 2 containing 1 µg of a mixture of single and double-stranded [³ 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 |
| Endonuclease Activity (Nicking) 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 |





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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 2 31 Mar 2021

Michael Tonello Packaging Quality Control Inspector 31 Mar 2021

