

New England Biolabs Certificate of Analysis

Product Name: McrBC
Catalog Number: M0272L
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: 10104683
Expiration Date: 08/2021
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 |
| M0272LVIAL | McrBC | 10098804 | Pass |
| B9000SVIAL | BSA, Molecular Biology Grade | 10089409 | Pass |
| B7002SVIAL | NEBuffer™ 2 | 10097265 | Pass |

| Assay Name/Specification | Lot # 10104683 |
|---|----------------|
| Non-Specific DNase Activity (16 Hour) 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 |
| 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 |

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

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Mala Samaranayake
Production Scientist
23 Mar 2021



Michael Tonello
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23 Mar 2021