

## 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:** 10132905  
**Expiration Date:** 07/2022  
**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                                      | 10132900   | Pass                 |
| N0418SVIAL           | McrBC Substrate                          | 10132899   | Pass                 |
| M0272LVIAL           | McrBC                                    | 10132903   | Pass                 |
| B9200SVIAL           | Recombinant Albumin, Molecular Biology G | 10106371   | Pass                 |
| B7002SVIAL           | NEBuffer™ 2                              | 10111608   | Pass                 |

| Assay Name/Specification  | Lot # 10132905 |
|---|----------------|
| <b>Non-Specific DNase Activity (16 Hour)</b><br>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>Endonuclease Activity (Nicking)</b><br>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           |
| <b>Exonuclease Activity (Radioactivity Release)</b><br>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           |

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

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08 Mar 2022



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