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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: 10154983
Expiration Date: 12/2022
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 | 10151274 | Pass | |
| N0418SVIAL | McrBC Substrate | 10132899 | Pass | |
| M0272SVIAL | McrBC | 10154981 | Pass | |
| B9200SVIAL | Recombinant Albumin, Molecular Biology G | 10150376 | Pass | |
| B7002SVIAL | NEBuffer™ 2 | 10143291 | Pass | |

| Assay Name/Specification | Lot # 10154983 |
|---|----------------|
| 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 [³H] 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.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.

Mala-Samaranayake Production Scientist

01 Jul 2022

Michael Tonello

Packaging Quality Control Inspector

01 Jul 2022