

## New England Biolabs Certificate of Analysis

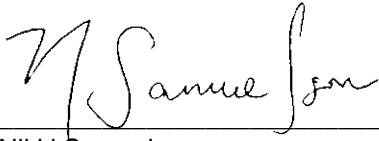
**Product Name:** Monarch® Buffer BX  
**Catalog Number:** T2041L  
**Packaging Lot Number:** 10237489  
**Expiration Date:** 03/2027  
**Storage Temperature:** 25°C  
**Specification Version:** PS-T2041L v3.0

| Monarch® Buffer BX Component List |                       |            |                      |
|-----------------------------------|-----------------------|------------|----------------------|
| NEB Part Number                   | Component Description | Lot Number | Individual QC Result |
| T2041-2                           | Monarch® Buffer BX    | 10237483   | Pass                 |

| Assay Name/Specification  | Lot # 10237489 |
|---|----------------|
| <b>Endonuclease Activity (Nicking)</b><br>A 50 µl reaction in rCutSmart™ Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 10 µl of Monarch® Buffer BX incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.   | <b>Pass</b>    |
| <b>Non-Specific DNase Activity (16 Hour)</b><br>A 50 µl reaction in rCutSmart™ Buffer containing 1 µg of PhiX174-HaeIII DNA and a minimum of 10 µl of Monarch® Buffer BX incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.                      | <b>Pass</b>    |
| <b>RNase Activity (Extended Digestion)</b><br>A 10 µl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 µl of Monarch® Buffer BX is incubated at 37°C. After incubation for 16 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection. | <b>Pass</b>    |

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

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10 Apr 2024



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16 Apr 2024