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## New England Biolabs Product Specification

Product Name: Monarch StabiLyseTM DNA/RNA Buffer

Catalog #: T2111L
Shelf Life: 36 months
Storage Temp: 25°C

Composition: Proprietary

Specification Version: PS-T2111L v1.0

Effective Date: 21 Mar 2024

## Assay Name/Specification (minimum release criteria)

Endonuclease Activity (Nicking) - A 50  $\mu$ l reaction in rCutSmart<sup>TM</sup> Buffer containing 1  $\mu$ g of supercoiled PhiX174 DNA and a minimum of 10  $\mu$ l of Monarch StabiLyse<sup>TM</sup> DNA/RNA Buffer incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.

Non-Specific DNase Activity (16 Hour) - A 50 µl reaction in rCutSmart<sup>TM</sup> Buffer containing 1 µg of PhiX174-HaeIII DNA and a minimum of 10 µl of Monarch StabiLyse<sup>TM</sup> DNA/RNA Buffer incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.

RNase Activity (Extended Digestion) - 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 StabiLyse<sup>TM</sup> DNA/RNA Buffer 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.

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Lauren Brown Quality Approver







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