New England Biolabs
Product Specification

Product Name: WarmStart® Colorimetric LAMP 2X Master Mix (DNA & RNA)
Catalog #: M1800S/L
Concentration: 2X Concentrate
Shelf Life: 12 months
Storage Temp: -20°C
Composition (1X): Proprietary
Specification Version: PS-M1800S/L v3.0
Effective Date: 12 Feb 2020

Assay Name/Specification (minimum release criteria)

Functional Testing (LAMP, Master Mix) - A 25 µl reaction with 1X WarmStart® Colorimetric LAMP Master Mix (DNA & RNA) in the presence of 1X LAMP Primers containing 10 ng genomic DNA and 1X LAMP fluorescent dye results in a threshold time of ≤ 20 minutes as determined by fluorescent detection.

Functional Testing (RT-LAMP, Master Mix) - A 25 µl reaction with 1X WarmStart® Colorimetric LAMP Master Mix (DNA & RNA) in the presence of 1X LAMP Primers containing 10 ng of genomic RNA and 1X LAMP fluorescent dye results in a threshold time of ≤ 20 minutes as determined by fluorescent detection.

Non-Specific DNase Activity (16 hour, Buffer) - A 50 µl reaction in 1X WarmStart® Colorimetric LAMP Master Mix (DNA & RNA) containing 1 µg of T3 or T7 DNA in addition to a reaction containing Lambda-HindIII DNA incubated for 16 hours at 37ºC results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.

qPCR DNA Contamination (E. coli Genomic) - A minimum of 1 µl of WarmStart® Colorimetric LAMP Master Mix (DNA & RNA) is screened for the presence of E. coli genomic DNA using SYBR® Green qPCR with primers specific for the E. coli 16S rRNA locus. Results are quantified using a standard curve generated from purified E. coli genomic DNA. The measured level of E. coli genomic DNA contamination is ≤ 1 E. coli genome.

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 WarmStart® Colorimetric LAMP 2X Master Mix (DNA & RNA) is incubated at 37ºC. After incubation for 4 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.

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Derek Robinson
Director, Quality Control

Date 12 Feb 2020