

New England Biolabs Product Specification

Product Name:	WarmStart® Multi-Purpose LAMP/RT-LAMP 2X Master Mix (with UDG)
Catalog #:	M1708S/L
Concentration:	2X Concentrate
Shelf Life:	12 months
Storage Temp:	-20°C
Composition (1X):	Proprietary
Specification Version:	PS-M1708S/L v1.0
Effective Date:	22 Jun 2021

Assay Name/Specification (minimum release criteria)

Functional Testing (LAMP, Master Mix) - A 25 µl reaction with 1X WarmStart® Multi-Purpose LAMP/RT-LAMP Master Mix (with UDG) 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® Multi-Purpose LAMP/RT-LAMP Master Mix (with UDG) 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, Master Mix) - A 50 µl reaction in 1X WarmStart® Multi-Purpose LAMP/RT-LAMP Master Mix (with UDG) containing 1 µg of T3 or T7 DNA in addition to a reaction containing Lambda-HindIII DNA incubated for 16 hours at 37°C 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® Multi-Purpose LAMP/RT-LAMP 2X Master Mix (with UDG) 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® Multi-Purpose LAMP/RT-LAMP 2X Master Mix (with UDG) is incubated at 37°C. After incubation for 4 hours, >90% of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.

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Date 22 Jun 2021

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Director, Quality Control

