

## New England Biolabs Product Specification

<i>Product Name:</i>	<i>LyoPrime WarmStart™ Fluorescent LAMP/RT-LAMP Mix (with UDG)</i>
<i>Catalog #:</i>	<i>L4401S/P</i>
<i>Shelf Life:</i>	<i>24 months</i>
<i>Storage Temp:</i>	<i>25°C</i>
<i>Composition:</i>	<i>Proprietary</i>
<i>Specification Version:</i>	<i>PS-L4401S/P v1.0</i>
<i>Effective Date:</i>	<i>14 Feb 2024</i>

### Assay Name/Specification (minimum release criteria)

**Functional Testing (LAMP, Master Mix)** - A 25 µl reaction with 1X LyoPrime WarmStart™ Fluorescent LAMP/RT-LAMP Mix (with UDG) in the presence of 1X LAMP primers containing 10 ng of genomic DNA 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 LyoPrime WarmStart™ Fluorescent LAMP/RT-LAMP Mix (with UDG) in the presence of 1X LAMP primers containing 10 ng of genomic RNA 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 LyoPrime WarmStart™ Fluorescent LAMP/RT-LAMP 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 2X LyoPrime WarmStart™ Fluorescent LAMP/RT-LAMP 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 2X LyoPrime WarmStart™ Fluorescent LAMP/RT-LAMP 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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## New England Biolabs Product Specification

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Date 14 Feb 2024

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Lauren Brown  
Quality Approver

