

WarmStart LAMP®

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ABSTRACT

How to run nucleic acid amplification using the Warm-Start LAMP kit.

Each reaction produces 25 μ L.

For the original protocol, look at: LAMP Protocol.pdf

*I have not verified the details of this protocol, I would like to remove it, but I cannot since it has been forked.

If you would like to use this protocol, I would recommend using the PDF above instead.

GUIDELINES

Gloves must be worn at all times.

Use all precautions to avoid contamination when making reaction mixture.

Always pipette mix each reagent in aliquot before pipetting.

MATERIALS

NAME Y	CATALOG #	VENDOR ~
WarmStart LAMP Kit (DNA and RNA) - 100 rxns	E1700S	New England Biolabs
DNAse/RNAse free distilled water	10977023	Thermo Fisher Scientific

MATERIALS TEXT

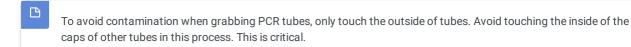
- 70% ethanol solution in DI water
- RNAway
- WarmStart LAMP Master Mix (2x)
- LAMP primer mix (10x)
- Target DNA or RNA
- RNAse free water

Prepare Work Area

- Spray entire work area with 70% EtOH including pipettes, tip holder used for holding PCR tubes, and work surface. Wipe with a paper towel.
- Spray entire work area with RNAway.

Gat		

- 3 Take styrofoam container to Marley 527 (directly across from Marley 509) and fill halfway with ice.
- 4 Set PCR tube holder on ice, and allow to cool for ③00:03:00.
- 5 Transfer Master Mix, primers, RNAse free water, and target tubes from freezer to PCR tube holder on ice.
- 6 Allow reagents to thaw on ice
- 7 Carefully obtain (2) 0.2 mL PCR tubes. Label one with "NTC" and the other "TARG". These will be your reaction vessels.



- 8 Vortex mix all reagents for approximately **© 00:00:05**.
- 9 Spin down all reagents for approximately **© 00:00:05**.

Prepare Reaction

- Using a 2-20 μ L pipette, transfer \mathbf{p} 9 \mathbf{p} 1 RNAse free water into the **TARGET** reaction vessel. Using a 2-20 μ L pipette, transfe \mathbf{p} 10 \mathbf{p} 1 RNAse free water into the **NTC** reaction vessel.
- 11 Using a 2-20 μL pipette, transfer 12.5 μl WarmStart Master Mix into each reaction vessel.
- 12 Using a 0.5-10 μ L pipette, transfer 2.5μ l Primer to each reaction vessel.
 - Primer will depend on what your target is. For E. Coli OH157, the primer tube is labelled with an 'F'.
- 13 Using a 0.5-10 μL pipette, transfer 11 μl Target into the **TARGET** reaction vessel.
- 14 Vortex mix the reaction mixture.

Run LAMP Reaction

16 Place reaction vessels into thermocycler.

17 Turn on thermocycler

18 Hit PROCEED to select a reaction cycle.

19 Scroll using the 'c' and '>' keys to get to LAMP3.

20 Press PROCEED to begin