WHAT IS CLAIMED IS:

1. A reaction mixture comprising reaction components for performing a standard loop mediated isothermal amplification (LAMP) reaction and an additional LAMP-specific additive composition for reducing a threshold time for a positive sample and reducing template-independent background amplification, wherein the LAMP-specific additive composition comprises:

a first additive selected from the group consisting of ethylenediaminetetraacetic acid (EDTA), ethylene glycol tetraacetic acid (EGTA) and a combination thereof; and

a second additive selected from the group consisting of bovine serum albumin (BSA), dimethyl sulfoxide (DMSO), nonionic surfactants, polymers and a combination thereof.

2. The reaction mixture according to claim 1, wherein a concentration of EDTA is 0.1-1.5 mM.

3. The reaction mixture according to claim 1, wherein a concentration of EGTA is 0.1-3 mM.

4. The reaction mixture according to claim 1, wherein a concentration of BSA is 0.5-10% (w/v).

5. The reaction mixture according to claim 1, wherein a concentration of DMSO is 0.5-7% (v/v).

6. The reaction mixture according to claim 1, wherein the nonionic surfactants include Tween-20, Tween-21, Tween-40, Tween-60, Tween-61, Tween-65, Tween-80, Span 20, Span 40, Span 60, Span 80, Span 83, Span 85 and Span 120.

7. The reaction mixture according to claim 1, wherein a concentration of the nonionic surfactant is 0.5-6% (v/v).

8. The reaction mixture according to claim 1, wherein the polymers include

polyethylene glycol (PEG), polyvinylpyrrolidone (PVP), Dextran and Ficoll.

9. The reaction mixture according to claim 8, wherein PEG includes PEG200 and PEG8000.

10. The reaction mixture according to claim 9, wherein a concentration of PEG200 is 0.5-8% (v/v), and a concentration of PEG8000 is 0.5-6% (w/v).

11. The reaction mixture according to claim 8, wherein a concentration of PVP is 0.5-10% (w/v).

12. The reaction mixture according to claim 8, wherein a concentration of Dextran is 0.5-5% (w/v).

13. The reaction mixture according to claim 8, wherein a concentration of Ficoll is 0.5-8% (w/v).

14. A reaction mixture comprising reaction components for performing a standard loop mediated isothermal amplification (LAMP) reaction and an additional LAMP-specific additive composition for reducing a threshold time for a positive sample and reducing template-independent background amplification, wherein the LAMP-specific additive composition is selected from the group consisting of:

a first composition comprising a first additive selected from the group consisting of polyethylene glycol (PEG), polyvinylpyrrolidone (PVP), Dextran, Ficoll and a combination thereof, and a second additive selected from the group consisting of dimethyl sulfoxide (DMSO), nonionic surfactants and a combination thereof; and

a second composition comprising a first additive selected from the group consisting of polyethylene glycol (PEG), Dextran, Ficoll and a combination thereof, and a second additive selected from the group consisting of bovine serum albumin (BSA), dimethyl sulfoxide (DMSO), nonionic surfactants and a combination thereof.

15. The reaction mixture according to claim 14, wherein PEG includes PEG200 and PEG8000.

16. The reaction mixture according to claim 15, wherein a concentration of PEG200 is 0.5-8% (v/v), and a concentration of PEG8000 is 0.5-6% (w/v).

17. The reaction mixture according to claim 14, wherein a concentration of PVP is 0.5-10% (w/v).

18. The reaction mixture according to claim 14, wherein a concentration of Dextran is 0.5-5% (w/v).

19. The reaction mixture according to claim 14, wherein a concentration of Ficoll is 0.5-8% (w/v).

20. The reaction mixture according to claim 14, wherein a concentration of BSA is 0.5-10% (w/v).

21. The reaction mixture according to claim 14, wherein a concentration of DMSO is 0.5-7% (v/v).

22. The reaction mixture according to claim 14, wherein the nonionic surfactants include Tween-20, Tween-21, Tween-40, Tween-60, Tween-61, Tween-65, Tween-80, Span 20, Span 40, Span 60, Span 80, Span 83, Span 85 and Span 120.

23. The reaction mixture according to claim 14, wherein a concentration of the nonionic surfactant is 0.5-6% (v/v).

24. A reaction mixture comprising reaction components for performing a standard loop mediated isothermal amplification (LAMP) reaction and an additional LAMP-specific additive composition for reducing a threshold time for a positive sample and reducing template-independent background amplification, wherein the LAMP-specific additive composition consists of a single additive selected from the group consisting of ethylene glycol tetraacetic acid (EGTA), polyvinylpyrrolidone (PVP), Dextran, Ficoll and Tween-80.

25. The reaction mixture according to claim 24, wherein a concentration of EGTA is 0.1-3 mM.

26. The reaction mixture according to claim 24, wherein a concentration of PVP is 0.5-10% (w/v).

27. The reaction mixture according to claim 24, wherein a concentration of Dextran is 0.5-5% (w/v).

28. The reaction mixture according to claim 24, wherein a concentration of Ficoll is 0.5-8% (w/v).

29. The reaction mixture according to claim 24, wherein a concentration of Tween-80 is 0.5-5% (v/v).