

Pretreatment-Free Rapid Detection of Tiamulin in Egg and Milk Samples using Gold Nanoparticles Based on Positive List System Regulations

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Supplementary information

Table S1 Specifications of TML antibody used in this study

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Item	Description
Product name	Mouse Anti-Tiamulin Monoclonal Antibody, Clone TML
Catalog number	CABT-L3067
Supplier	Creative Diagnostics, Shirley, NY, USA
Host species	Mouse
Isotype	IgG
Clone	TML
Immunogen	Tiamulin conjugated with a carrier protein
Conjugation	Unconjugated
Purification method	Purified from mouse ascites
Applications	ELISA, LFIA
Format	Liquid
Buffer	PBS (no preservative)
Concentration	6 mg/mL
Batch/Lot number	JW07B121
Storage conditions	−20 °C for long-term storage
Intended use	For research use only

Table S2 Nitrocellulose membrane specifications

Item	Specification
Backing	100 μm polyester
Membrane thickness	95–135 μm
Wicking rate	70–100 s/4 cm
Pore size	15 μm
Width	25 mm

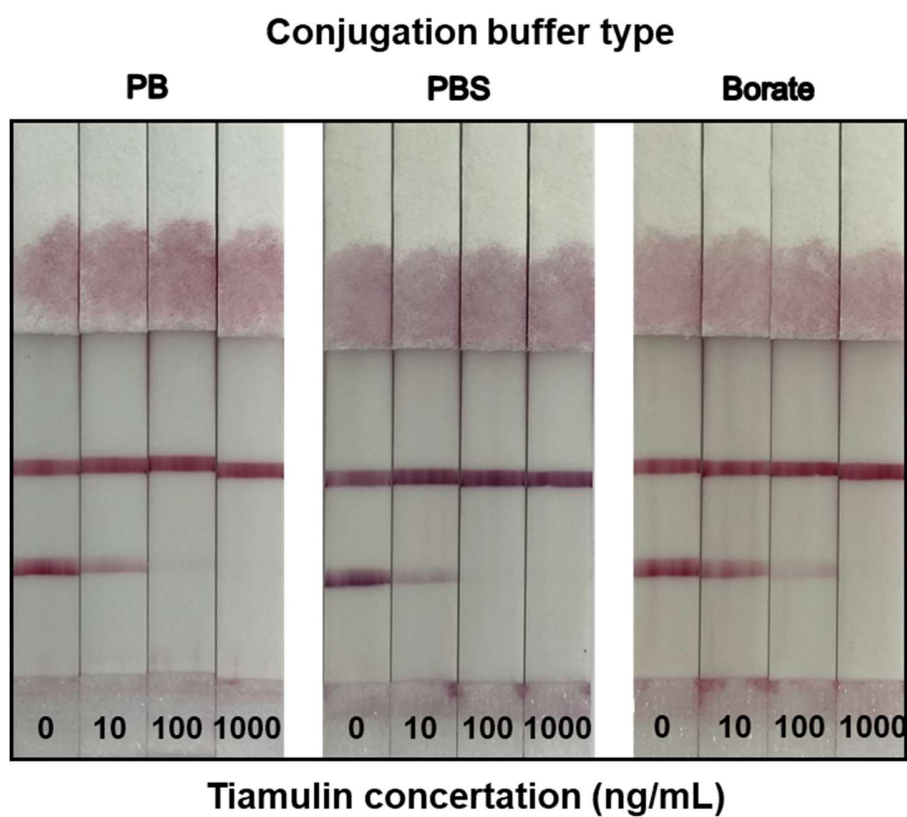


Fig. S1 Optimization of LFIA strip for the detection of TML. Effect of the various types of blocking buffers on LFIA strips. The TML sample concentrations are 0, 10, 100 and 1000 ng/mL

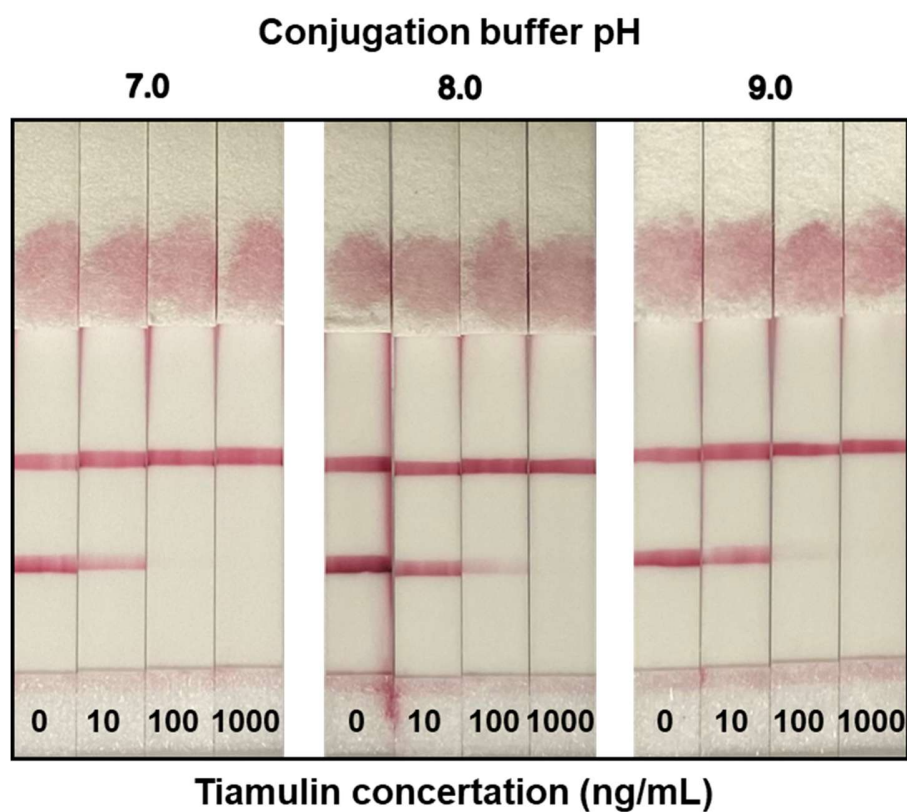


Fig. S2 Optimization of LFIA strip for the detection of TML. Effect of the various pH values (7, 8, 9) of 10 mM PB on LFIA strips. The TML sample concentrations are 0, 10, 100 and 1000 ng/mL

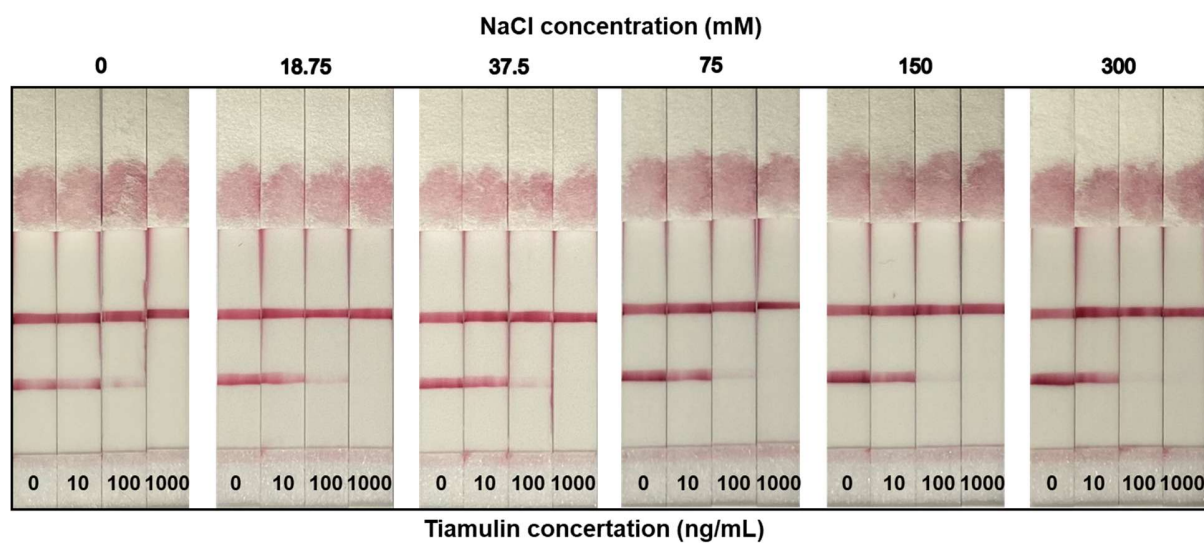


Fig. S3 Optimization results of NaCl at different concentrations (0, 18.75, 37.5, 75, 150, and 300 mM) on LFIA test strips. The TML sample concentrations are 0, 10, 100 and 1000 ng/mL

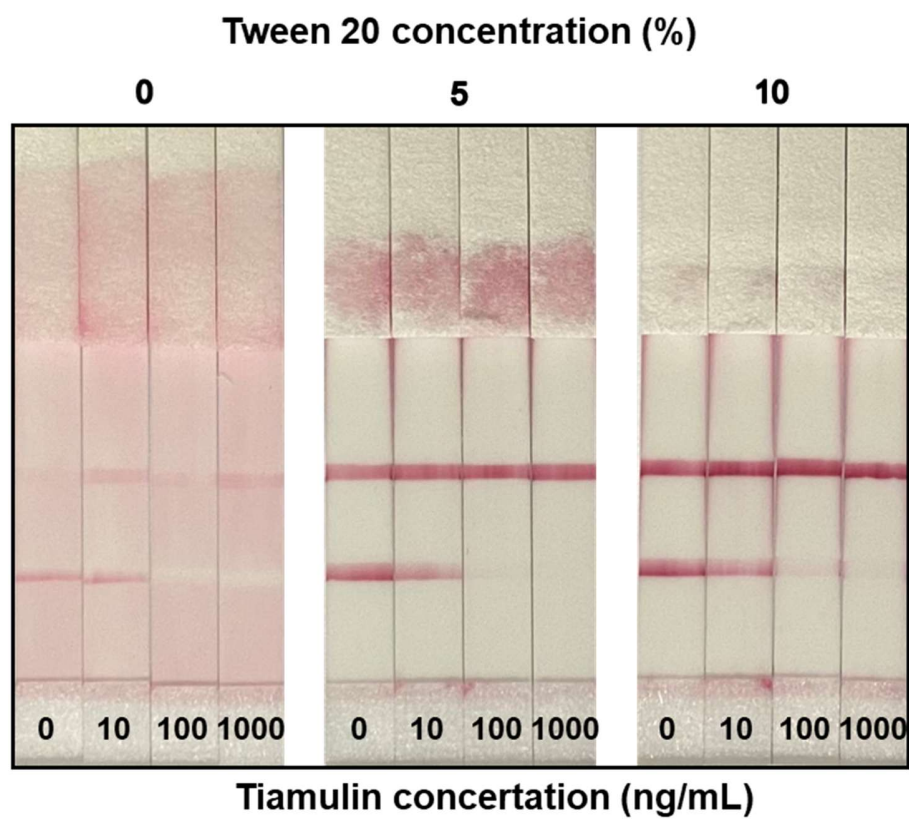


Fig. S4 Optimization results of tween 20 at different concentrations (0, 5, and 10 %) on LFIA test strips. The TML sample concentrations are 0, 10, 100 and 1000 ng/mL