

**NITROFURAN (AHD) RAPID  
TEST DIPSTICK  
MANUAL**

## Nitrofurantoin (AHD) Rapid Test Dipsticks (Milk, Tissue, Honey, Egg)

**Catalogue Number. IP100107**

### **Brief**

This product is used for testing Nitrofurantoin (AHD) in fresh Milk, Tissue (chicken, aquatic products (fish, shrimp, crab), Honey or Egg (egg or duck egg) sample qualitatively. Easy to operate, high sensitivity.

### **Principle**

The Nitrofurantoin (AHD) rapid test dipstick is based on competitive inhibition immunochromatographic principle. In the flow process, Nitrofurantoin (AHD) in the sample combined with Nitrofurantoin (AHD) specific colloidal gold-labeled monoclonal antibody, inhibit the combination between antibody and Nitrofurantoin (AHD)-BSA conjugate on Test line of NC membrane, lead to the color change of Test line. When the sample has no Nitrofurantoin (AHD) residue or concentration lower than detection limit, T line is darker than C line or T line has same color with C line; when the concentration is equal to or higher than detection limit, T line is obviously lighter than C line or T line has no color. No matter whether there is Nitrofurantoin (AHD) residue in sample, C line will appear, it means the test is valid.

### **Technical specifications**

Specifications: 96 stripes/kit

Detection limit: Milk: 0.2ng/g (0.2ppb), Tissue, Honey, Egg: 0.5ng/g (0.5ppb)

### **Components**

1	Nitrofurantoin (AHD) test dipsticks bottle (include test dipsticks, desiccant, micro-wells reagent)	12 bottles
2	Manual	1 piece
3	1M HCl	2 bottles
4	1M NaOH	2 bottles
5	1M K <sub>2</sub> HPO <sub>4</sub> solution	2 bottles
6	Derivatization reagent	1 bottle
7	Sample buffer	2 bottles

### **Sample preparation**

1. 0.1M K<sub>2</sub>HPO<sub>4</sub> solution: Dilute 1M K<sub>2</sub>HPO<sub>4</sub> solution with deionized water at 1:9.
2. **Samples Preparation**

#### **a) Fresh milk**

Take 3ml mixed fresh milk sample into 50ml centrifuge tube, add 6ml deionized water, 1.5ml 1M HCl and 300ul Derivatization reagent, shake and mix for 2min, put at 60°C water bath for 30min;

### b) Honey

Take  $3 \pm 0.05$ g honey sample into 50ml centrifuge tube, add 6ml deionized water, 750ul 1M HCl and 300ul Derivatization reagent, shake and mix for 2min, put at 60°C water bath for 30min;

### c) Tissue

Take  $3 \pm 0.05$ g homogenized tissue sample into 50ml centrifuge tube, add 6ml deionized water, 750ul 1M HCl and 300ul Derivatization reagent, shake and mix for 2min, put at 60°C water bath for 30min;

### d) Egg

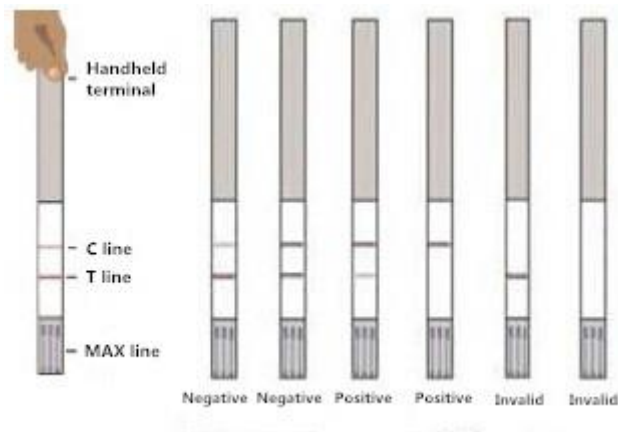
Take  $3 \pm 0.05$ g homogenized egg sample into 50ml centrifuge tube, add 6ml deionized water, 750ul 1M HCl and 300ul Derivatization reagent, shake and mix for 2min, put at 60°C water bath for 30min;

3. Add 7.5ml 0.1M  $K_2HPO_4$  solution, 600ul 1M NaOH and 10ml ethyl acetate, shake and mix for 1min, centrifuge at 4000r/min for 10min;

4. Take 5ml up-layer liquid into glass tube, blow to dry at 56°C by Nitrogen or air.

5. Add 2ml n-hexane shake to dissolve the dry residue (if do not dissolve the residue completely, it may lead to the result unstable), then add 0.6ml sample buffer, shake to even for 30s, be stable until layered, absorb out the up-layer (if appear emulsion, centrifuge at 4000r/min for 5min);

6. Absorb 200ul down-layer liquid (water layer), ready to test. (Avoid absorb the up-layer liquid).



### Operation procedures

1. Read the instruction carefully before use. Return test dipsticks and sample into room temperature.

2. Take bottles needed from the kit package, take out required microwells and dipsticks, making proper marks. Please use these test dipsticks within 1h. Seal the cap of the bottles, avoid moisture.

3. Take 200ul of the test samples into the microwells, then repeatedly absorb for 5-10 times, mix the sample with the reagent in the microwells completely until no solid judged by eyes (this is a very important step).

4. Incubate for 5min at room temperature (20-25°C), insert the test dipsticks into the microwells with the "MAX" end fully dipped in to the mixture solution.

5. Incubate for 5-8min at room temperature again, read the result, it is invalid in other time.

### ***Test Result Interpretation***

**Negative:** T line is darker than C line, or T line has same color with C line. It means there is no Nitrofurantoin (AHD) residue in sample or the residue is lower than detection limit.

**Positive:** T line is obviously lighter than C line or T line is invisible. It means the Nitrofurantoin (AHD) residue is equal to or higher than detection limit.

**Invalidation:** C line isn't seen wine red. It means the test card is out of efficacy, out of date or improper operation. Please run the test again using another package. If the invalid tests keep happening, please contact the supplier.

### **Specificity**

There is no cross reaction with Nitrofurantoin AMOZ, AOZ and SEM.

### **Precautions**

1. The test card can be used only once at room temperature, do not use test card out of expiry date.
2. Do not repeat use the tips to avoid cross pollution.
3. Do not touch the white membrane surface in the middle of test card, avoid sunlight and fan blowing directly.
4. Wear gloves when testing.
5. Please contact the supplier for any questions.

**Storage:** Store at 2-8 °C in dark, sealed, dry place, no frozen.

**Expiry date:** 12 months; date of production is on box.