

The avermectins are a series of drugs and pesticides used to treat parasitic worms and insect pests. They are a group of 16-membered macrocyclic lactone derivatives with potent anthelmintic and insecticidal properties. Other anthelmintics derived from the avermectins include ivermectin, doramectin, eprinomectin, and abamectin.

This product utilizes the high affinity of monoclonal antibody against avermectin, which can identify abamectin, ivermectin and eprinomectin in milk easily. The detection limit of the kit can meet both European and USA MRLs when use properly.

1. Detection Limit (LOD) in raw milk sample

Antibiotics	LOD($\mu\text{g/L}$)	Antibiotics	LOD($\mu\text{g/L}$)
Abamectin	4-6	Emamectin Benzoate	2-4
Ivermectin	10-15	Doramectin	150-200
Eprinomectin	5-8		

2. Kit components

- Test Strip, 96 pcs in 12 plastic bottles, 8 pcs / bottle.
- Sample diluent, 20ml * 2
- Kit insert
- NBReader (optional)

3. Reagents required but not provided

- 70% ethanol

4. Sample preparation

Take 800ul of sample into a centrifuge tube, then add 200ul of sample diluent and 400ul 70% ethanol in order, vortex for 1 min, the mixture used as the test sample.

5. operations

- a) Read the instructions before experiment. Bring the test kit and samples to room temperature. Milk samples should be fully liquid without any agglomeration and deposition.
- b) Take bottles needed from the kit package, take out required wells and strips, and make proper marks. Please use the test strips within 1h. Seal the cap of the bottles and store the unneeded kit.
- c) Take 200ul of the test sample into the microwell, then repeatedly absorb up and down for 5 times to mix the sample with the reagent in the wells completely. The mixture should be pink, and then start the timer.
- d) Incubate for **5min at room temperature (20-25°C)**, Insert the test strip into the well with the "Immersed" end fully dipped in to the mixed reagent and sample.
- e) Incubate for **5min at room temperature (20-25°C)** again. Take out the strip; determine the result according to **Part 6**.

6. Result Determination

Positive (+): Line C is red, line T has no color or the color is lighter than or the same as Line C. If no line T, the result is also positive.

Negative (-): Line T and Line C are both red, and color of Line T is deeper than Line C.

Invalid (x): Line C has no color. In this case, please reread the instructions and repeat assay with new strip.

Notice: If the result of the strip needs to be recorded, please cut the "Immersed" end, and dry the strip, then keep it as file or paste in your recording book.

7. Specificity

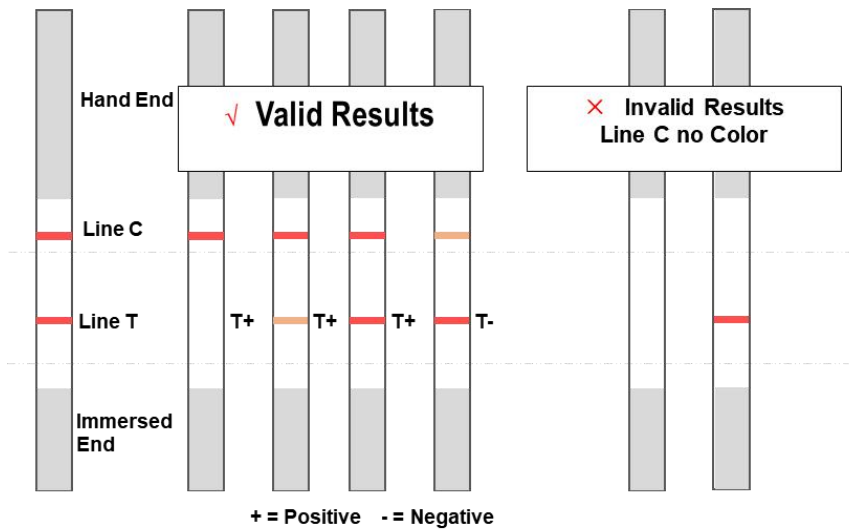
The results are all negative when test sulfonamides, quinolones and beta-lactams with the concentration of 500ppb. The cross reactivity between doramectin and abamectin is 6%.

8. Storage

2-8°C in cool dark place, do not freeze. The kit is valid for 12 months. Lot No. and expired date are printed on the package.

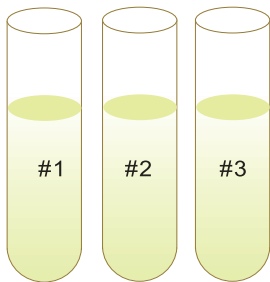
9. Notice and Precautions for a successful experiment.

- Perform the assay following the instruction; do not touch the membrane of the strip.
- Seal the bottle after taking out required strips.
- This strip is used **for only once**; please do not use it repeatedly.
- This kit is only for screening test, positive result should be further confirmed with other method.

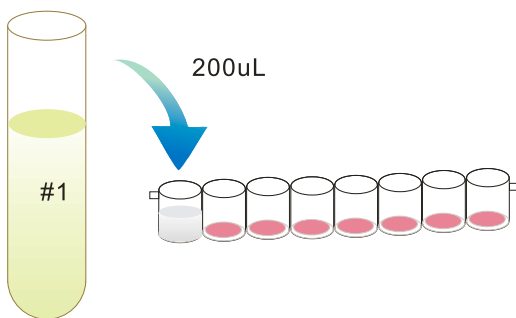
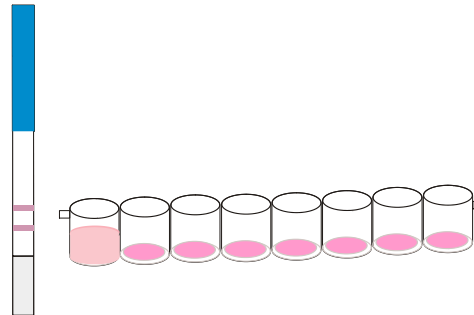


Schematic Assay Steps

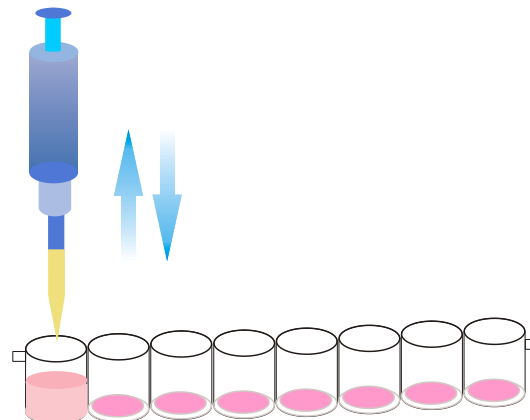
1. Bring all test samples to room temperature; number them to keep record.



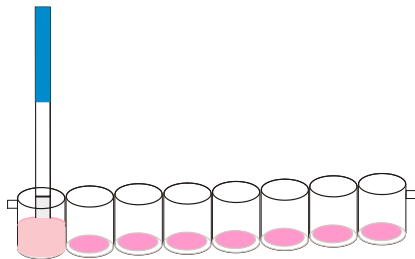
2. Take test kit according to your sample number and also number the kit wells to keep record and consistency.



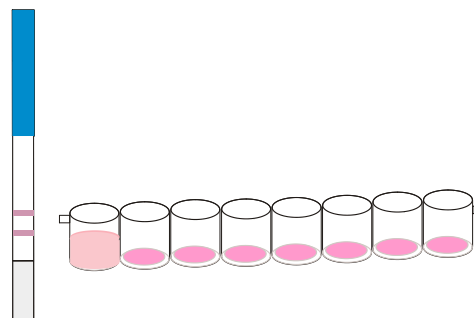
3. Take 200ul sample into the wells using pipet. You can also then put the well into the well holder to avoid sample spill.



4. Absorb up and down for 5 times to mix sample with reagent completely. Start the timer when the mixture is pink. **Incubate for 5 min at room temperature (20-25°C).**



5. Insert the "Immersed" end of the strip into the mixture; **Incubate for 5min at room temperature (20-25°C) again.**



6. Take out the strip; judge the result according to **kit instruction.**

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