

Estradiol is an endogenous steroid and progestogen sex hormone involved in the menstrual cycle, pregnancy, and embryogenesis of humans and other species. It belongs to a group of steroid hormones called the progestogens, and is the major progestogen in the body.

This product utilizes the high affinity of monoclonal antibody against estradiol, which can identify estradiol 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

Detection Limit: **5-8 ppb**

## 2. Kit components

- Test Strip, 96 pcs in 12 plastic bottles, 8 pcs / bottle.
- Kit insert
- NBReader (optional)
- Incubator (optional)

## 3. 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 milk 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 **3 min at 40°C**, Insert the test strip into the well with the "Immersed" end fully dipped in to the mixed reagent and sample.
- e) Incubate for **5 min at 40°C** again. Take out the strip; determine the result according to **Part 4**.

## 4. 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.

## 5. Specificity

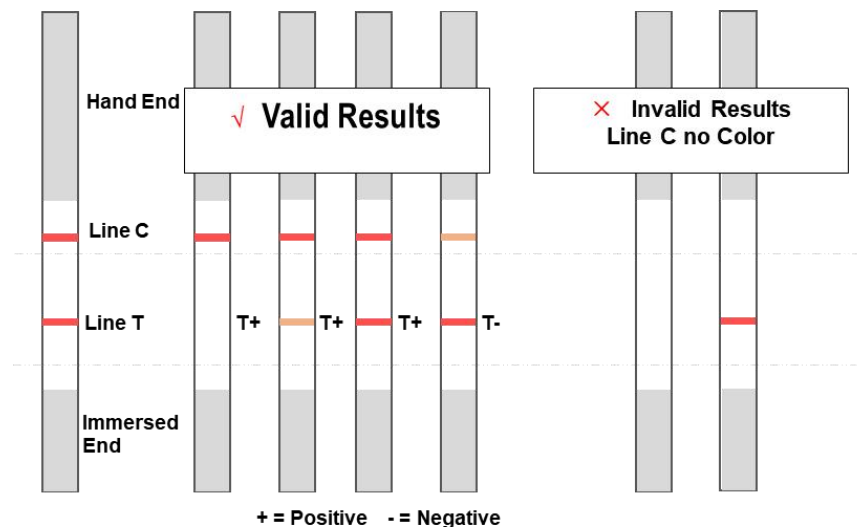
The results are all negative when test dexamethasone, betamethasone, zearalanol, oestrone and progesterone with the concentration of 500ppb.

## 6. 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.

## 7. Notice and Precautions for a successful experiment.

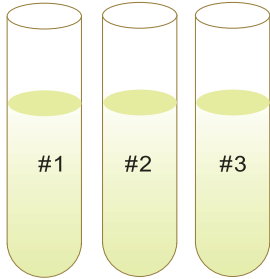
- Perform the assay following the instruction; do not touch the membrane of the strip.
- Seal the bottle after taking out required strips.



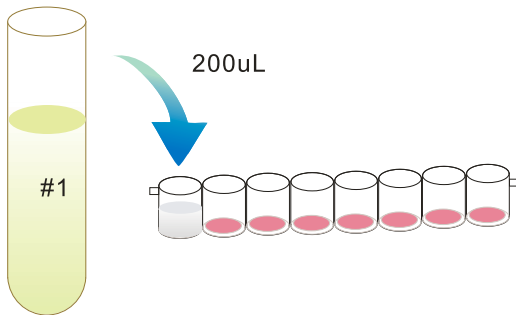
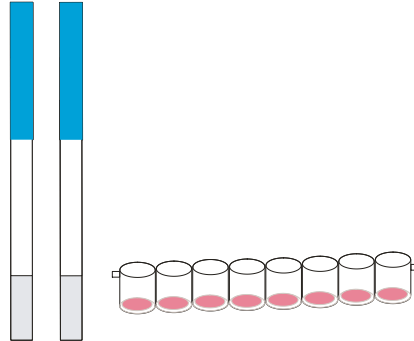
- This strip is used **for only once**; please do not use it repeatedly.
- This kit is only for screening test, positive result should be further confirmed with other method.

### Schematic Assay Steps

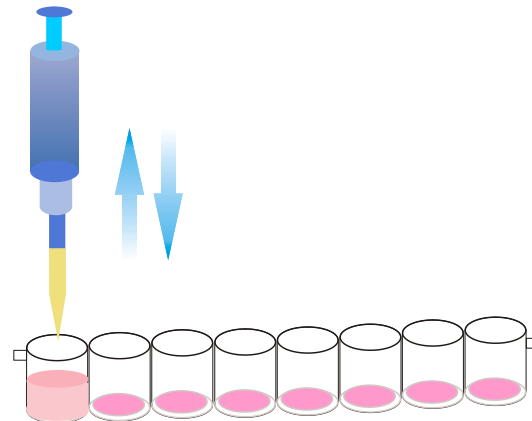
1. Bring all test samples to room temperature; number them to keep record.



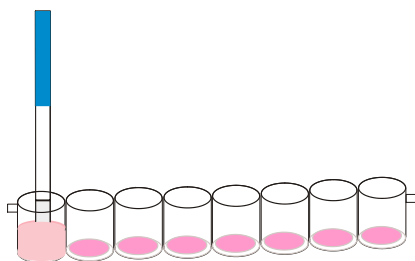
2. Take test kit according to your sample number and also number the kit wells to keep record and consistency.



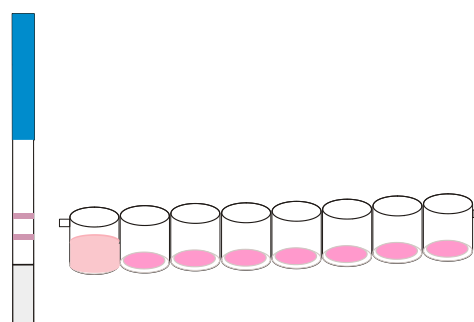
3. Take 200ul diluent sample into the wells using pipet. You can also then put the well into the well holder to avoid sample spill.



4. Absorb up and down for 5 times to mix sample with reagent completely. Start the timer when the mixture is pink. **Incubate for 3 min at 40°C.**



5. Insert the "Immersed" end of the strip into the mixture; **Incubate for 5 min at 40°C again.**



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

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