

Introduction.

Tetrasensor Milk is a receptor-based assay for rapid determination of the amount of every tetracycline molecules present in a milk sample (tetracycline, oxytetracycline, doxycycline, chlortetracycline, methacycline, rolitetracycline, ...). The sensitivity of the test 'TK00544' is set at 100 ppb for tetracycline. This means that 100% of milk having at least 100 ppb of tetracycline will give a POSITIVE answer. The sensitivity limit of 'TK00543' is 25ppb.

Reaction mechanism.

Tetrasensor is a competitive test that exploits the activity of a receptor for the recognition of tetracycline molecules present in the Milk. The test requires the use of two elements provided in the kit. The first element is a reagent containing a certain amount of labeled receptor and the second is a dipstick consisting of a set of membrane where two capture lines are printed in green. The milk sample, is added together with the receptor and the dipstick. While starting to run vertically on the strip, the receptor binds tetracycline molecules present in the milk. When the liquid passes through the green capture lines, red color appears. The first line captures the remaining active receptor and the second line takes a certain amount of the excess of reagent that has passed through the first line. This second upper line serves as a control line and becomes visible in all cases.

Composition of the kit.

Each kit contains everything needed to perform 96 tests.

- 12 strips of 8 Reagent microwells containing the labeled receptor.
Microwells are placed into a plastic pouch with desiccant.
- 4 bottles of 24 Dipsticks.
- 1 empty tray for μ well strips.
- 1 Minipet of 200 μ l.
- 96 Tips for Minipet.
- 1 information notice.

General Remarks.

We recommend storing your Kit at 4°C. upon arrival.

Let products reach room temperature before opening and avoid exposure to moisture.

The best temperature to perform the test is room temperature around 20°C \pm 5°C. Let your milk sample reach room temperature before running one test.

The Milk Procedure.

This procedure is dedicated for milk analysis, the limit of the detection for tetracycline is set just below 100 ppb.

This procedure is described to easily run up many samples in ones. You can do as much as you want and of course, you can run a single sample.

1. Take the box out of the fridge. Wash and dry hands thoroughly.
2. Decide how many sample you want to run together.
3. Place the empty μ well tray on the table.
4. Take the pouch containing reagent microwells. Open the pouch and place on your tray as many reagent microwells as the number of milk sample you have decided to run together.

Be careful, if you do not intent to use all the 8 microwells, leave the cap on unused ones and replace them immediately into the pouch. Close the pouch with the desiccant bag in it.

5. Place a tips on the Minipet and transfer 200 μ l of your first milk sample into the first μ well containing the dry reagent pellet. Mix with the use of your pipette and tips to get a homogeneous pink colour.
6. Open the dipsticks bottle, take as many dipsticks as the number of sample you have and close the bottle. We recommend to write the milk identification number directly on the white paper of the dipstick (opposite arrows side).
7. Dip one dipstick into the μ well in a way to submerge the bottom edge of the dipstick (arrows downward)
8. Start incubation over ten (10) minutes at room temperature.
9. Repeat from 5 to 8 with the next samples.
10. After 10 minutes, take out the dipstick of the μ well. You get one or two coloured red lines printed on your strip that must be interpreted or quantified immediately (see Quantisensor manual instructions).
11. If you do not intent to run a new test, please close firmly the dipsticks bottle and the μ well pouch with desiccant and replace your kit into the fridge.

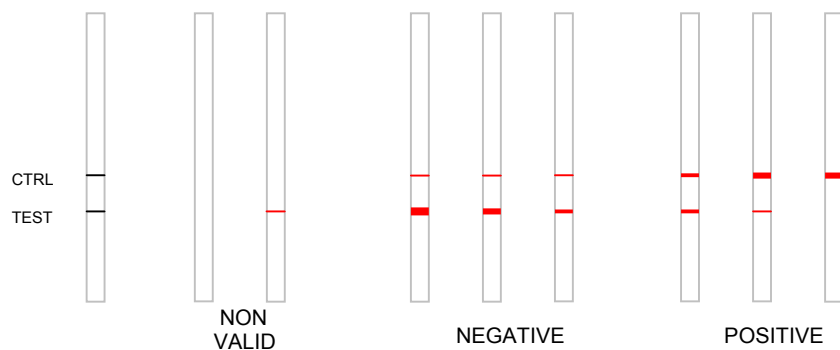
Milk Test Procedure in summary:

- Add 200 µl of Milk sample into the same µwell.
- Mix to get an homogeneous pink solution.
- Dip one Dipstick into the µwell.
- Incubate over 10 min at RT.
- Interpret by comparing the colored lines you get on the strip.
- Use Quantisensor for optical measurement and results storage.

Eyes Interpretation of the test:

Comparing the intensity between the bottom «TEST line» and the upper weak «CTRL line» does eyes interpretation of the result.

- If no red line occurs, the test is non valid.
- As being valid, the upper control (CTRL) line must turn to red.
- If the bottom « TEST » line is more visible than the upper « CTRL » line, the sample is considered to be NEGATIVE for tetracycline (< 100 ppb).
- If the bottom « TEST » line is as visible or less visible than the upper « CTRL » line, the sample is considered to be POSITIVE for tetracycline (>= 100 ppb).
- No bottom « TEST » line indicates a HIGHLY POSITIVE sample for tetracycline.
- When hesitating, consider positive and confirm by making a second interpretation a few minutes later.

**Milk Tetrasensor Kit.****Product reference: TK00544**

Kit for 96 assays.
Detection Limit: 100 ppb

UNISENSOR S.A.
Liège Science Park,
6, Allée des Noisetiers,
B-4031 Angleur, Belgium
www.unisensor.be
www.tetrasensor.com

info@unisensor.be
Tel : + 32 4 252 66 02
Fax : + 32 4 252 90 55