

Technical Information

Description

Rapid inhibition test for the detection of β -lactam antibiotics and tetracyclines in raw or pasteurised cow, sheep or goat milk, or mixed milk (tank milk).

Temperature range of the milk: between 4°C and 37°C.

Mode of operation

EcoTest easy MRL is based on the specific antigen-antibody reaction and immunochromatography. The above-mentioned antibiotics in the sample lead to a concentration-dependent colour reaction on the test strip.

Packet contents and commercial sizes

Individual packet containing 8 test strips and 8 sample containers

Bulk pack with 12 individual packets (= 96 tests) per pack
Instructions for use

Optional accessories

Pipettes, pipette tips, timer, sample rack

Storage

Store the product in its original packaging at 2 to 8 °C, do not freeze.

An interruption of the cooling cycle of up to 20 days for transport or delivery will not cause a problem.

Shelf life

12 months from the production date under correct storage conditions.

Cross-reactions

EcoTest easy MRL shows no cross-reactions with clenbuterol, ractopamine, salbutamol, melamine, trenbolone, sulphonamides, chloramphenicol, macrolides and other active ingredients.

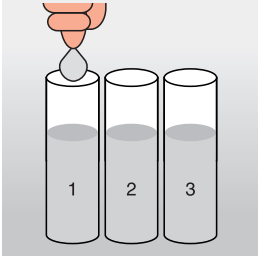
Detection limits

MRL (Maximum Residual Limit = maximal allowed residual amount according to EU specifications)

DL (Detection Limit)

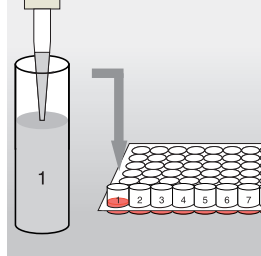
| List of antibiotics | | |
|----------------------|-------------------------|------------------------|
| β -lactams | MRL ($\mu\text{g/l}$) | DL ($\mu\text{g/l}$) |
| Penicillin G | 4 | 2-4 |
| Ampicillin | 4 | 3-4 |
| Amoxicillin | 4 | 3-4 |
| Oxacillin | 30 | 3-4 |
| Cloxacillin | 30 | 3-4 |
| Dicloxacillin | 30 | 6-8 |
| Nafcillin | 30 | 20-30 |
| Cefquinom | 20 | 15-20 |
| Cefacetril | 125 | 50 |
| Cefalonium | 20 | 6-8 |
| Cefazolin | 50 | 50 |
| Cefoperazone | 50 | 5 |
| Cephapirin | 60 | 8-10 |
| Ceftiofur | 100 | 50-70 |
| Tetracyclines | | |
| Tetracycline | 100 | 25 |
| Oxytetracycline | 100 | 35 |
| Doxycycline | 100 | 20 |
| Chlortetracycline | 100 | 15 |

Instructions for the Rapid Inhibition Test



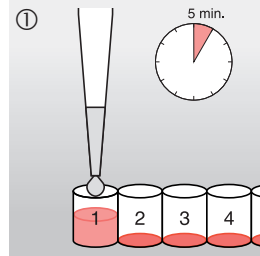
Sample preparation

- The milk samples to be tested should be free of flocs or cream.
- Label the samples to prevent confusion.
- The test works with raw or pasteurised cow, sheep, goat or mixed milk.
- The milk can be tested either cooled or at room temperature.



Test preparation

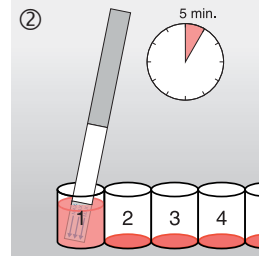
- Take the required number of sample containers from the packet and remove the cap. If you do not need all 8 containers, the extra ones can be snapped off.
- Label the sample containers to prevent confusion.
- To ensure the samples stand firmly, place the sample containers in the sample rack.



Running the test

Picture ①

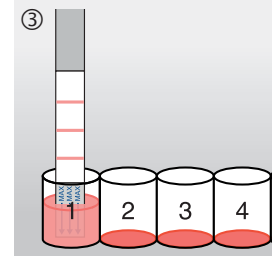
- Set the pipette tip on the EcoTest pipette, push the plunger down 1 press mark and dip it into the milk sample.
- Draw up the milk sample (200 µl) by slowly releasing the plunger.
- Empty the sample into the sample container by pressing the plunger down to the 2nd press mark.
- Remove the pipette from the sample and let go of the plunger.



- Stir the milk sample with the pipette tip until the test disc has dissolved and the milk in the sample container has a homogeneous pink colour.
- Wait for 5 minutes and add the test strip.

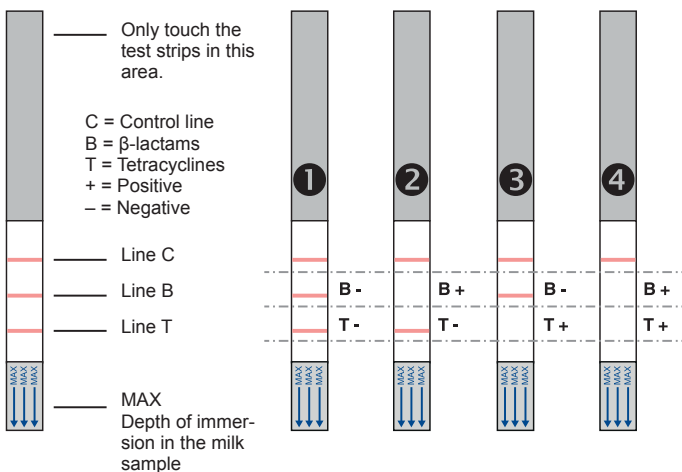
Picture ②

- Dip the test strip into the sample container with the arrow downwards until they touch the base of the container.
- Wait 5 to 6 minutes.



Picture ③

- To evaluate the results, compare the lines shown on the test strips with the graphic below "Evaluate the test".
- It is not relevant for the test results, if the line colours are weak or strong.
- If you want to keep the test record, please cut off the max end using scissors, and store the test strip in a dry dark place.



Evaluation of the test

- Evaluate the test within 5 to 6 minutes of inserting the test strip.
- The control line C must appear in every case, otherwise the test is invalid.
- **Test result negative:** Lines B and C are same or darker than control line C.
- **Test result positive:** Line B or T is absent or clearly lighter than control line C.
- Picture ① no antibiotics from the list overleaf detected
- **Test result positive:** Line B or T is absent or clearly lighter than control line C.
- Picture ② beta-lactams detected
- Picture ③ tetracyclines detected
- Picture ④ beta-lactams and tetracyclines detected
- If positive detection is suspected, then wait another 10 minutes or repeat the test to be certain.

Important notes

- Do not use test strips and sample containers from different packets.
- Do not use the test after the best before date.
- Do not touch the test area of the test strip.
- Keep the packets firmly closed during storage.
- Only use the test strips and sample containers once.
- Store unused test strips and sample containers in the closed packet, in cool, dry conditions and protect from light.

