

Charm® MRL Beta-lactam RF Tetracycline

2 Minute Combo Test

The Charm® Beta-lactam RF Tetracycline Test (MRLBLRFET2) is the fastest **Combo** test for antibiotics in milk... just **2 minutes!** Charm Sciences has designed the new combination kit to meet the specific requirements for export of milk products to the **Russian Federation** (Federal Law No.88 FL 88, “Technical regulation on milk and dairy products”).

The 2 minute combination test is designed for use by dairy producer, milk intake, laboratory, field, transport and regulatory personnel.

Meets Global Regulations

The Charm MRLBLRFET2 Test also meets the 100 ppb MRL requirement for tetracycline drugs, a level which most countries around the world have adopted in their milk regulations, e.g., Australia, China, Japan, Korea, New Zealand, Taiwan and Vietnam.

Speed, sensitivity and simplicity... all rolled into one test strip.

MRLBLRFET2 test at a glance

- ▶ Test Time: 2 minutes (cow), 8 minutes (goat and sheep)
- ▶ 2 tests in 1 test strip
- ▶ Rapid One Step Assay (ROSA®)
- ▶ Meets EU/MRL/RF/CODEX



**Beta-lactam Tetracycline
2-Minute Combo-Test**

Sensitivity in Milk

Table 1. Sensitivity – Detection Ranges in Cow Milk at 0 to 7 °C

Beta-lactam Drug	Detection Range † (ppb)	EU / CODEX MRL (ppb*)
Amoxicillin	3-4	4
Ampicillin	3-4	4
Cefacetrole	30-50	125
Cefalonium	3-5	20
Cefazolin	15-30	50
Cefoperazone	1-2	50
Cefquinome	15-20	20
Ceftiofur and Metabolite^	40-70	100 / 100
Cephapirin	6-10	60 §
Cloxacillin	10-20	30
Dicloxacillin	10-20	30
Oxacillin	15-20	30
Penicillin G	1.5-2.5	4 / 4
Tetracycline Drug	Detection Range (ppb)	Russian Federation (ppb)
Chlortetracycline ‡	6-10	10
Doxycyline	6-10	10
Oxytetracycline ‡	6-10	10
Tetracycline ‡	6-10	10

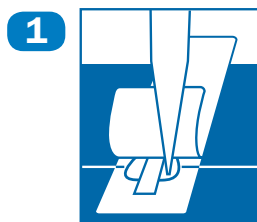
* parts per billion or µg/kg

^ Ceftiofur parent drug sensitivity is approximately 1/4 those reported in the table

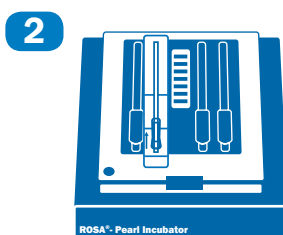
§ U.S. Tolerance is 20 ppb cephalosporin

‡ Russian Technical Regulation on Milk and Milk Products. Federal Law No.88 FL 88 of 12 June 2008

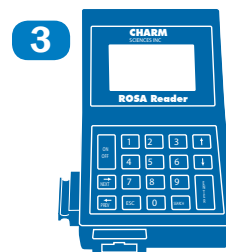
Simple and fast test procedure



Add milk sample to ROSA strip



Incubate 2 minutes (cow)
8 minutes (goat and sheep)



Read the results!

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