

# ROSA : MRL Beta-lactam Test for Bovine Milk



Charm MRL Beta Lactam Test

## MRLBL AT A GLANCE

- ▶ Specifically match E.U. Maximum Residue Limits (Table 1)
- ▶ Rapid One Step Assay (part of ROSA family of tests)
- ▶ Minimal equipment required
- ▶ Results in 8 minutes!
- ▶ Continuity from farm to table

## SAVE MILK WITH PRECISE TEST

Charm MRL™ was specifically designed to limit rejection of nonviolative milk by overly sensitive screening test. Charm MRL is the only beta-lactam test that detects 10 primary beta-lactams at or below maximum residue limits. The test is easy to use, portable and requires minimal equipment. Charm MRL saves milk that is safe and wholesome for processing and consumption.

**Table 1: SENSITIVITY LEVELS (ppb)**

BETA-LACTAMS	CHARM MRL	EU/CODEX MRL
Amoxicillin	3-4	4
Ampicillin	3-4	4
Cefquinome	15-20	20
Cefazolin	12-20	50
Ceftiofur + Metabolites	30-60	100
Cephalonium	3-5	20
Cephapirin	6-10	60
Cloxacillin	25-35	30
Dicloxacillin	20-30	30
Penicillin G	2-3	4

## OTHER AVAILABLE ROSA TESTS FOR:

- ▶ Aflatoxin M1 at 50 ppt
- ▶ Enrofloxacin
- ▶ Beta-lactams (SL & SL-6 for U.S./Canada)
- ▶ Tetracyclines
- ▶ Sulfadimethoxine/Sulfamethazine
- ▶ Sulfamethazine



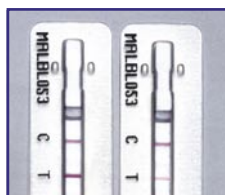
## PROCEDURE



- 1 Add milk sample to MRL strip. Close incubator lid to start timer.



- 2 After 8 minutes, incubator beeps and 'test complete' light will flash. Remove MRL Strip.



- 3 Visually compare Test line (T) to the Control line (C).  
**For numerical results, insert valid test in ROSA Reader.**

## EQUIPMENT

### ROSA Reader



### ROSA Reader

- ▶▶ Results in just 5 seconds
- ▶▶ Download to printer or computer
- ▶▶ Stores 4500 data points

- ▶▶ Records sample ID, test type, operator ID, date, time, lot number, reading and result interpretation. It even sorts data by performance controls

### ROSA Incubator



### ROSA Incubator

- ▶▶ Quad and dual incubators
- ▶▶ Self timing with indicator lights/beeper

- ▶▶ Count down timer display (on quad only)
- ▶▶ Auto Start when lid closed
- ▶▶ Auto Reset when lid opened

## MRL KIT

- ▶▶ Available in 20, 100 or 500 test kits
- ▶▶ Kit Codes (lab): LF-MRLBL-20K ; LF-MRLBL-100K ; LF-MRLBL-500K
- ▶▶ Kit Codes (farm): LF-MRLBL-100SUPK
- ▶▶ 4 ppb Penicillin G positive control included with every lab kit