



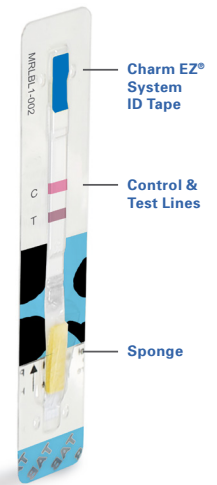
Charm MRL Beta-lactam 1-Minute Test for Milk

Product Overview

Charm® ROSA® (Rapid One Step Assay) technology is trusted by the dairy industry worldwide for fast and accurate milk residue screening.

The Charm MRL Beta-lactam 1-Minute Test (MRLBL1) is specifically designed to limit the rejection of non-violative milk by closely meeting EU and CODEX Maximum Residue Limits (MRL) levels for the most common beta-lactams used on dairy farms.

This 1 minute test is changing the way the dairy processors test for beta-lactams before pick-up, on the tanker, and at the receiving bay.



Charm ROSA Strip

Benefits of MRLBL1 Test Include:

- Achieves results in 1 minute
- Detects 14 beta-lactam drugs
- Meets EU/CODEX MRL
- Validated by ILVO- Institute for Agricultural and Fisheries Research, Belgium
- Approved by the Polish Veterinary Research Institute (PIWET)

Simple Procedure with the Charm EZ System



Add Sample



Incubate



Read Results in Less Than 5 Seconds



For Batch Processing

Incubate multiple strips simultaneously, then read results in the Charm EZ system.

Sensitivity in Milk

Sensitivity* Table - Detection Ranges in Cow Milk at 0 to 7 °C		
Beta-lactam Drug	Detection Range† (ppb*)	EU/CODEX MRL (ppb*)
Amoxicillin	3 to 4 ppb	4 ppb
Ampicillin	3 to 4 ppb	4 ppb
Cefacetrole	30 to 40 ppb	125 ppb
Cefalonium	8 to 12 ppb	20 ppb
Cefazolin	20 to 30 ppb	50 ppb
Cefoperazone	2 to 3 ppb	50 ppb
Cefquinome	30 to 40 ppb	20 ppb
Ceftiofur and Metabolite^	60 to 100 ppb	100/100 ppb
Cephapirin	15 to 20 ppb	60 ppb§
Cloxacillin	15 to 20 ppb	30 ppb
Dicloxacillin	10 to 15 ppb	30 ppb
Oxacillin	10 to 20 ppb	30 ppb
Penicillin G	2 to 3 ppb	4/4 ppb

^ Ceftiofur parent drug sensitivity is approximately 1/2 that reported in the table
 § U.S. tolerance is 20 ppb cephalosporins
 † Positive at least 95% of the time
 * parts per billion, µg/kg or µg/L

Ordering Information

Order Codes	Each Kit Includes
LF-MRLBL1-40NSK	Test Strips
LF-MRLBL1-100K	Test Strips and Positive Controls

See Operator's Manual for additional kits and order codes.