



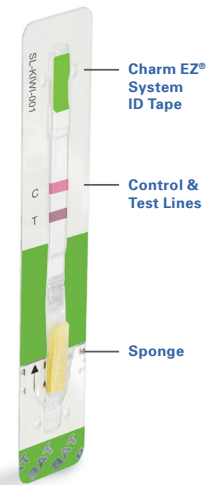
## Charm SL KIWI Test for Milk

### 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 SL KIWI Test (KIWI) is approved by the New Zealand Food Safety Authority. It is specifically manufactured to detect cefalonium (cephalonium) closer to the EU MRL (20 ppb) in milk. Rapid commercially available test kits detect this dry cow administered drug at overly sensitive levels, typically below 5 ppb. The KIWI test detects cefalonium residues at 15 ppb in milk, which provides a better match to established microbial inhibition assays, and a fairer test to the dairy producer. Typical brand names for this drug include Cevravin\*, Cepha Forte\* and Cefamaster\*.

\*Cevravin is a registered trademark of Intervet / Schering-Plough Animal Health. Cepha Forte is a registered trademark of Bomac. Cefamaster is a registered trademark of Merial Ancare.



Charm ROSA Strip

### Benefits of KIWI Test Include:

- Achieves results in 8 minutes
- Detects beta-lactam drugs
- Meets New Zealand Maximum Residue Limits and approved by NZFSA

### 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 - Detection Ranges in Cow Milk at 0 to 7 °C

Concentration (µg/kg)	Amoxicillin	Ampicillin	Ceftiofur <sup>^</sup>	Caphapirin	Penicillin G
1					0
2	3	3			13
3			-		73
4	70	13		0	100
5			0		100
6	100	83			
8	100	100		50	
10	100	97	0		
12				97	
16				100	
20			0	100	
40			0		
60			23		
80			100		
100			100		
New Zealand MRL (µg/kg)	4 <sup>†</sup>	4 <sup>†</sup>	100	10	4 <sup>‡</sup>
90% Positive with 95% Confidence <sup>^§</sup> (µg/kg)	5.6	8.5	77	13.7	3.6

<sup>^</sup> The test sensitivity for ceftiofur was evaluated using milk containing ceftiofur and desfuroylceftiofur (DFC) related metabolites from treated animals. The ceftiofur tolerance is based on measuring the sum of ceftiofur and desfuroylceftiofur related metabolites in milk as desfuroylceftiofur.

<sup>§</sup> The 90% sensitivity with 95% confidence detection level is calculated based on U.S. FDA-CVM statistical analysis of independent lab blind study results. Results with the exception of ceftiofur are based on fortified raw milk samples.

<sup>†</sup> EU MRL by default (µg/kg).

Beta-lactam Drug	Detection Range* (µg/kg)	New Zealand MRL (µg/kg)	Beta-lactam Drug	Detection Range* (µg/kg)	New Zealand MRL (µg/kg)
Cefacetrile	20 to 40	125 <sup>‡</sup>	Cefquinome	20 to 40	30
Cefalexin	30 to 70	125 <sup>‡</sup>	Cefuroxime	10 to 20	100 <sup>‡</sup>
Cefalonium	10 to 20	20 <sup>‡</sup>	Cloxacillin	30 to 70	30 <sup>‡</sup>
Cefazolin	30 to 50	50 <sup>‡</sup>	Dicloxacillin	30 to 70	30 <sup>‡</sup>
Cefoperazone	10 to 20	50 <sup>‡</sup>	Oxacillin	30 to 70	30 <sup>‡</sup>

\* Positive at least 95% of the time.

<sup>‡</sup> EU MRL by default (µg/kg).

## Ordering Information

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

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

[www.charm.com](http://www.charm.com)

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