CowSide II Test®

BROAD SPECTRUM **Antibiotic Test for Milk**

CowSide® II test

COWSIDE II AT A GLANCE

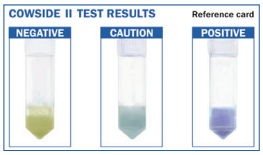
- **Broad spectrum antibiotic inhibition test for the dairy industry**
- **Detects more drugs closer to regulatory limits**
- **Each lot has custom incubation time for optimal sensitivity**
- **Color results are stable for up to 16 hours**
- **Runs on existing incubator equipment**

ABOUT COWSIDE II

The new Charm® CowSide II test has superior sensitivity to beta-lactams, sulfonamides, aminoglycosides and especially tetracyclines. Breakthrough sensitivity to tetracyclines makes it the first inhibition test to most closely match established safe levels and tolerances. CowSide II consists of a single service vial that contains pre-measured bacterial spores*, media, and a pH indicator. Reagents are unit dosed and compartmentalized to ensure uniformity, eliminating reagent transfer steps and preventing inadvertent contamination and reagent loss.

HOW IT WORKS

The agar in the vial is purple. Milk is added to the vial and incubated. The spores germinate and grow, generating acid, causing the color to change to yellow. If antibiotics are present in the milk, microbial growth is retarded and/or inhibited so that no acid is generated and the antibiotic positive samples remain purple.



** Bacillus stearothermophilus var. calidolactis*

CowSide® II vs Delvotest® vs ROSA®

Antimicrobial drugs	CowSide II (ppb) Read Time: 2.45 - 3 hours	Delvotest SP-NT[1] (ppb) at reading time of 3 hrs	ROSA (ppb) 8 Minute Test	US Safe Level/ Tolerance (ppb)
Beta-lactams				
Penicillin G	2-3	2-3	3.6	5
Ampicillin	3-4	6-7	8.5	10
Amoxicillin	3-4	3-5	5.6	10
Ceftiofur*	50-100	50-100[2]	77	100
Cephapirin	8-10	6-8	13.7	20
Cloxacillin	10-25	20-30	50	10
Tetracyclines				
Oxytetracycline	75-100	800	50-100	300
Tetracycline	50-100	800	10-30	300
Chlortetracycline	200-300	ND	50-100	300
Sulfonamides				
Sulfamethazine	75-125	100-250	6	10
Sulfadimethoxine	25-50	ND	1	10
Sulfadiazine	40-60	100-150	2	10
Aminoglycosides				
Neomycin	100-150	300-600	ND	150
Gentamicin	75-150	200	ND	30
Streptomycin	>500	> 500	7	125
Macrolides				
Erythromycin	75-100	200	ND	50
Spiramycin	300-400	800-1000	ND	ND
Tylosin	20-30	50	ND	20
Pirlimycin	25-50	ND	ND	400
Other antibiotics				
Dapsone	1-2	1-2.5	ND	ND
Enrofloxacin	1000-2000	>500	8	ND
Trimethoprim	200-300	200-300	ND	ND

Superior Sensitivity for a **Healthier** World

[1] http://www.dsm.com/le/en_US/delvotest/html/home.htm

[2] Ceftiofur Metabolite is not detected until approximately 200-500 ppb, above the safe level. This claim by DSM may be for ceftiofur parent drug only. * ceftiofur total metabolite, ND=Not Determined