

Charm II Antibiotic Analysis for Dairy Products at MRL Levels



Charm II 6600 Analyzer

FAMILIES DETECTED

- ▶ Aminoglycosides
- ▶ Amphenicols/Chloramphenicol
- ▶ Beta-lactams
- ▶ Macrolides/Lincosamides
- ▶ Novobiocin
- ▶ Sulfonamides
- ▶ Tetracyclines

SAMPLE SIZE

5 ml

SAMPLE PREPARATION

None

PREPARATION TIME

None (Raw Milk, Pasteurized)
Minimal preparation required for cream, condensed, and powdered.

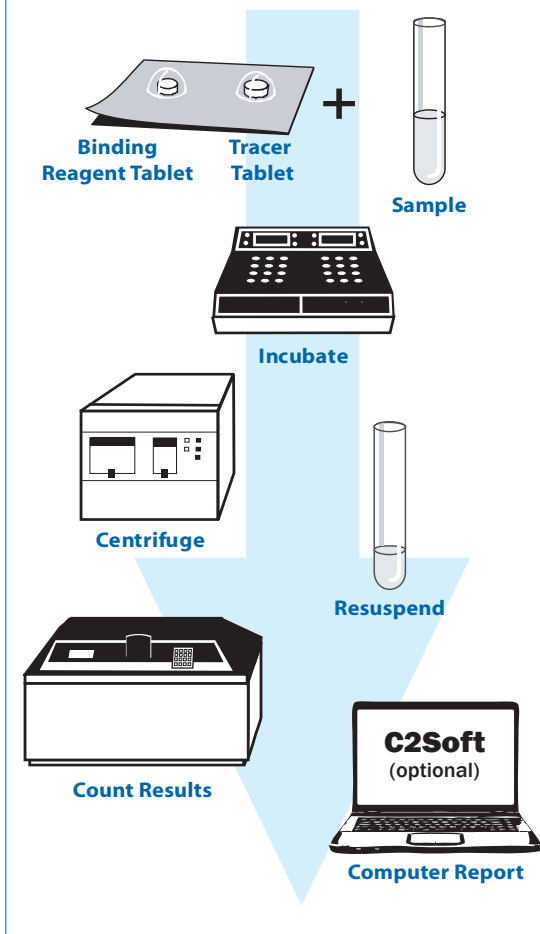
ASSAY TIME

Approximately 10 minutes, depending on drug family.

CAPACITY

6 to 12 samples, depending on assay.

PROCEDURAL FLOW CHART



SAMPLE PRINTOUT

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Date = 09/23/10
Time = 14:28:12
Operator      = 1
Time Counted = 60
Sample I.D.   = 1258

Assay = Beta-Lactams
Lot#   = TBL8 041
Control Point = 840
Sample (CPM) = 1025
Interpretation = Not Found
    
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Charm II Kit	Drug	Test Sensitivity ¹ (ppb)	EU MRL/ CODEX (ppb)
Aminoglycoside (GTMRL)	Gentamicin	100	100/200
	Neomycin	40	500/1500
Aminoglycoside (STMRL)	Streptomycin	200	200
	Dihydrostreptomycin	150	200
	Gentamicin	50	100/200
Beta-lactams (TBL8MRL)	Penicillin-G	2-3	4/4
	Amoxicillin	4-5	4
	Ampicillin	3-4	4
	Cefalonium	3-5	20
	Ceftiofur ²	15-20	100/100
	Cephapirin	3-4	60
	Cloxacillin	25-30	30
	Oxacillin	25-30	30
	Penethamate	2-3	4
	Cefazolin	10-20	50
	Cefquinome	15-20	20
	Dicloxacillin	15-25	30
	Nafcillin	25-30	30
Chloramphenicol (AIIHM)	Chloramphenicol	0.1	0.3
Macrolides (MMRL)	Erythromycin	40	40
	Pirlimycin	80	100/100
	Tilmicosin	20	50
	Tylosin	50	50/100
	Spiramycin	50	200/200
	Lincomycin	100	150/150
	Clindamycin	100	N/A
	Tulathromycin	20	N/A
Novobiocin (NTBL)	Novobiocin	30-50	50
Sulfonamides (SULFAMRL)	Sulfamethazine	94	100/25
	Sulfadimethoxine	40	100
	Sulfadiazine	49	100
	Sulfathiazole	73	100
	Other Sulfas	20-500	100
Tetracyclines³ (TMRL)	Oxytetracycline	100	100/100
	Tetracycline	20	100/100
	Chlortetracycline	100	100/100

¹ Exceeds 90% positive at a 95% confidence limit

² Total of parent drug and metabolite

³ Cumulative sum of parent compounds and 4-epimers