

Charm® II Antibiotic Analysis for Aquaculture



Charm II 7600 Analyzer

- FAMILIES DETECTED**
- Aminoglycosides
 - Amphenicols/Chloramphenicol
 - Beta-lactams
 - Macrolides
 - Sulfonamides
 - Tetracyclines

SAMPLE SIZE 10 g (20 g for Chloramphenicol)

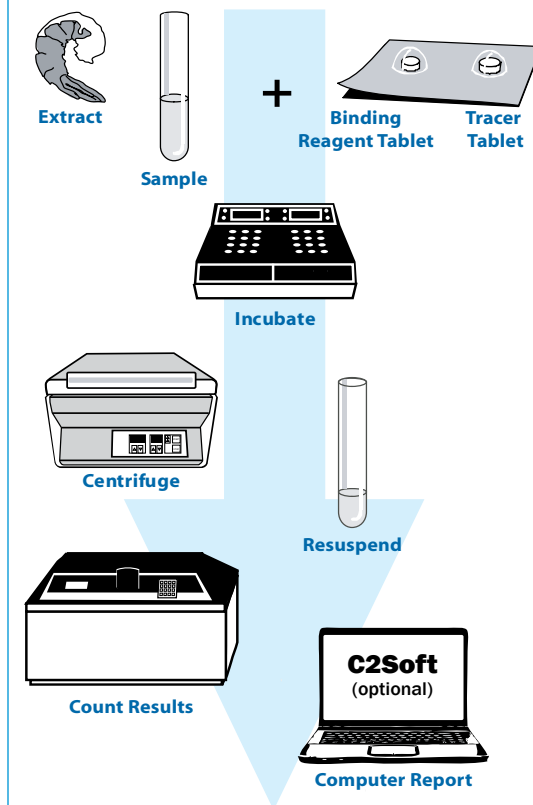
SAMPLE PREPARATION Homogenize Tissue in Charm II extraction buffer.
Heat at 80°C.
Place in ice water bath for 10 minutes, and centrifuge for 10 minutes.
Pour off supernatant and check pH.

PREPARATION TIME Approximately 75 minutes, depending on the number of samples.

ASSAY TIME 12 to 22 minutes, depending on drug family.

CAPACITY 6 samples in assay.

PROCEDURAL FLOWCHART



SAMPLE PRINTOUT

```

Date = 09/23/10
Time = 14:28:12
Operator      = 1
Time Counted = 60
Sample I.D.   = 7764

Assay = Chloramphenicol
Lot#   =      ATTBL 014
Control Point = 2564
Sample (CPM) = 3676
Interpretation = Not Found
    
```



Charm® II Antibiotic Analysis for Aquaculture

Charm II KIT	Drug	Test Sensitivity (ppb)	Safe Level / Tolerance (ppb)
Aminoglycoside (STIIHT)	Streptomycin	500	500
	Dihydrostreptomycin	500	500
Aminoglycoside (GIIHT)	Gentamicin	100	100
	Neomycin	30	250
Beta-lactams (PIIT)	Penicillin-G	50	50
	Amoxicillin	50	10
	Ampicillin	40	10
	Cephapirin	40	100
	Ceftiofur	400	1000 / 2000 [†]
	Cloxacillin	500	10
	Oxacillin	500	None
	Dicloxacillin	300	None
Chloramphenicol & other Amphenicols (CIIHT)	Chloramphenicol (Alternative method for 0.5 ppb Chloramphenicol)	10 or 1	Zero Tolerance
	Florfenicol	200	300
Chloramphenicol (AIIHT)	Chloramphenicol	0.3	Zero Tolerance
Macrolides (EIIIT)	Erythromycin	100	100 / 125 [†]
	Tylosin	400	200
	Spiramycin	400	—
	Pirlimycin	600	300
	Tilmicosin	50	—
	Lincomycin	400	100
Sulfonamides (SMIIHT)	Sulfamethazine	100	100
	Sulfadimethozine	100	100
	Sulfathiazole	100	100
	Sulfachloropyridazine	100	100
Tetracyclines (TIIHT)	Tetracycline	25	2000 [‡]
	Chlortetracycline	100	2000 [‡]
	Oxytetracycline	100	2000 [‡]

[†] US Safe Level/Tolerance varies according to tissue type

[‡] Sum of all tetracycline residues

Charm Sciences, Inc.

659 Andover Street, Lawrence, MA 01843-1032, USA

Tel: +1.978.687.9200 | Fax: +1.978.687.9216 | Email: info@charm.com | www.charm.com

© Copyright 2010 Charm Sciences, Inc. Charm is a registered trademark of Charm Sciences, Inc. MRK-121-001 0810

