SENSITIVITY

Family	Antibiotic	Porcine muscle		Bovine muscle		Chicken muscle		Salmon / Coley		Milk	
		MRL (µg/kg)	CCβ	MRL (µg/kg)	CCβ	MRL (µg/kg)	CCβ	MRL (µg/kg)	CCβ	MRL (µg/L)	CCβ
Aminoglycosides	Dihydrostreptomycin	500	125	500	125	-	125	-	125	200	50
	Gentamicin	50	50	50	50	-	50	50	50	100	100
	Kanamycin A	100	100	100	100	100	100	-	100	150	75
	Neomycin B	500	100	500	100	500	100	500	100	1500	25
	Paromomycin	500	250	500	500	500	500	500	500	forbid.	250
	Streptomycin	500	250	500	250	-	250	-	250	200	100
ß-Lactams	Amoxicillin	50	25	50	25	50	25	50	25	4	4
	Ampicillin	50	25	50	25	50	25	50	25	4	4
	Cefacetrile	-	50	-	50	-	50	-	50	125	50
	Cefalexin	-	3500	200	3500	-	3500	-	3500	100	1600
	Cefalonium	-	5	-	5	-	5	-	5	20	2,5
	Cefapirin	-	75	Sum = 50	50	-	50	-	50	Sum = 60	5
	Desacetylcefapirin	-	100		100	-	100	-	100		30
	Cefazolin	-	100	-	100	-	100	-	100	50	20
	Cefoperazone	-	3	-	3	-	3	-	3	50	1
	Cefquinome	50	50	50	50	-	50	-	50	20	20
	Ceftiofur	1000	50	1000	50	1000	50	-	50	100 (ceftiofur +	25
	Desfuroylceftiofur	1000	2000	1000	2000	1000	2000	-	2000	DFC+ DCCF)	50
	Cloxacillin	300	50	300	50	300	50	300	50	30	6
	Dicloxacillin	300	30	300	30	300	30	300	30	30	12
	Nafcillin	-	300	300	300	300	300	-	300	30	75
	Oxacillin	300	50	300	50	300	50	300	50	30	10
	Penicillin G	50	5	50	5	50	5	50	5	4	2
	Penicillin V	25	12,5	-	12,5	25	12,5	-	12,5	-	4
	Piperacillin	-	5	-	5	-	5	-	5	-	5
Sulfonamides	Sulfachloropyridazine		1		1		1		1		1
	Sulfaclozine		500		500		1000		500		150
	Sulfadiazine		50		50		50		50		50
	Sulfadimethoxine		50		50		50		50		20
	Sulfadimidine		100		100		100		100		50
	Sulfadoxine		10		10		10		10		10
	Sulfaguanidine		1		1		1		1		0,5
	Sulfamerazine	Combined	20	Combined	20	Combined	20	Combined	20	Combined	20
	Sulfameter	sulfonamides =	5	Sulfonamides =	5	sulfonamides =	5	Sulfonamides =	5	sulfonamides =	2,5
	Sulfamethizole	100	1	100	1	100	1	100	1	100	1
	Sulfamethoxazole		10		10		10		10		5
	Sulfamethoxypyridazine		0,25		0,25		0,25		0,25		0,125
	Sulfamonomethoxine		10		20		10		20		10
	Sulfanilamide		50		50		50		50		20
	Sulfapyridine		0,5		0,5		0,5		0,5		0,5
	Sulfaquinoxaline		50		50		50		50		25
	Sulfathiazole		0,5		0,5		0,5		0,5		0,25
	Dapsone	5	0,2	5	0,2	5	0,2	5	0,2	5	0,1
Macrolides	Spiramycin	250	250	200	200	200	200	-	200	200	200
	Tildipirosin	1200	1200	400	1200	-	1200	-	1200	forbid.	500
	Tilmicosin	50	50	50	50	75	50	50	50	50	12,5
	Tylosin A	100	10	100	10	100	10	100	10	50	10
	Tylvalosin	50	125	50	125	-	125	-	125	-	20
Lincosamides	Clindamycin	-	150	-	500	-	300	-	500	-	100
	Lincomycin	100	25	100	25	100	25	100	25	150	20
Polymyxin	Colistin	150	150	150	150	150	150	150	150	50	25
Tetracyclines	Chlortetracycline	100	25	100	100	100	100	100	100	100	25
	Demeclocycline	-	50	-	100	-	100	-	100	-	50
	Doxycycline	100	25	100	25	100	25	100	25	forbid.	12,5
	Methacycline	-	25	-	50	-	50	-	50	-	25
	Oxytetracycline	100	50	100	100	100	100	100	100	100	50
	Tetracycline	100	50	100	50	100	50	100	50	100	75
(F)Quinolones	Cinoxacin	-	800	-	800	-	800	-	900	-	50
	Ciprofloxacin	Sum = 100	10	Sum = 100	20	Sum = 100	20	Sum = 100	20	Sum = 100	2
	Enrofloxacin		5		5		5		5		1
	Danofloxacin	100	250	200	200	200	200	100	200	30	30
	Difloxacin	400	50	400	50	300	50	300	50	forbid.	25
	Enoxacin	-	50	-	50	-	50	-	50	-	5
	Flumequine	200	800	200	2000	400	2000	600	2000	50	50
	Lomefloxacin	-	15	-	15	-	15	-	15	-	3
	Marbofloxacin	150	20	150	20	-	20	-	20	75	2
	Nalidixic acid	-	2000	-	2000	-	2000	-	2000	-	50
	Norfloxacin	-	2,5	-	10	-	10	-	10	-	2
	Ofloxacin	-	15	-	15	-	15	-	15	-	1
	Oxolinic acid	100	800	100	1000	100	1000	100	1000	forbid.	62,5
	Pefloxacin	-	10	-	20	-	20	-	20	-	2
	Sarafloxacin	-	125	-	125	-	125	-	125	-	5
Phenicols	Chloramphenicol	0,3	0,1	0,3	0,1	0,3	0,1	0,3	Tbd	0,3	0,1
	Florfenicol	Sum = 300	50	Sum = 200	50	Sum = 100	50	1000	Tbd	forbid.	20
	Florfenicol Amine		100		100		100	1000	Tbd		50
	Thiamphenicol	50	50	50	35	50	35	50	Tbd	50	25
Pleuromutilins	Tiamulin	100	25	-	25	100	25	-	100	-	12,5
	Valnemulin	50	50	-	50	-	50	-	50	-	10

Contact us for more informations :
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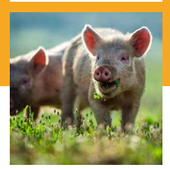
BEADOPLEX™
Antibiotics

Simple multiplex and multimatrix solution for the simultaneous screening of > 80 antibiotic residues

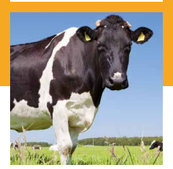
MILK



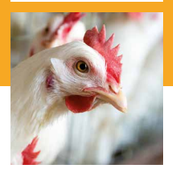
PORCINE



BOVINE



POULTRY



FISH



SEAFOOD



1 WELL

1 SAMPLE

10 ANTIBIOTIC FAMILIES

MORE THAN 80 RESIDUES

unisensor
DIAGNOSTIC ENGINEERING

ASSAY PRINCIPLE

BEADYPLEX™ combines simultaneous competitive immunoassays in the same single reaction. The test uses unique reagents comprising mixtures of antibiotic-conjugated beads (assay competitors), broad-range antibiotic binders (receptors and antibodies), and fluorescent secondary binders. Each bead, individually encoded by its specific size and internal fluorescence, in combination with a primary binder, enables the detection of well-defined groups of antibiotics.

In a first assay step the beads and primary binders are incubated with the sample extract. In the second assay step the labelled secondary binders detect the remaining primary binders on the beads surface, thus generating the final assay signal. The resulting "beads-binders" complexes are then characterized by the Flow Cytometer, which entails the classification of the beads by discrimination of their sizes and internal fluorescence levels, and the measurement of external fluorescence intensities.

The presence of antibiotics from a particular family is identified by a signal decrease for the corresponding encoded bead, with respect to a zero dose control sample.

BENEFITS

BROAD SPECTRUM

> 80 antibiotics from 10 families in one single test

HIGH THROUGHPUT

96 tests in microplate format

EASY PROTOCOL

Fast and easy 3-steps protocol

BROAD APPLICABILITY

Meat, fish, seafood, and raw milk

TEST PROCEDURE

BUFFER EXTRACTION (TISSUE)*

* Milk samples require only 15 minutes centrifugation

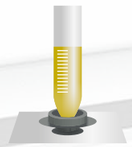
01

Take 1g of sample and add 1 ml of extraction buffer



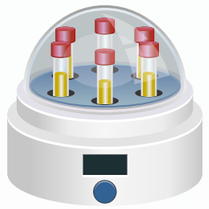
02

Shake 10 min.



03

Centrifuge 15 min.



04

Filtrate supernatant using microplates provided with the kit



IMMUNOASSAY (96-MICROPLATE FORMAT)

01



Add 50 µl filtrated extract
+ 50 µl beads mix
+ 50 µl primary binders mix per well

INCUBATE 30 MIN. + WASH

02

Add 150 µl fluorescent secondary binders per well

INCUBATE 15 MIN. + WASH

03

Add 150 µl assay buffer per well

AUTOMATIC MICROPLATE ANALYSIS



Automatic microplate reading on Flow Cytometer**, with report generation

**ACEA NovoCyte® 2000 recommended

Sample Name:	F4:MRL3	
Sample Type:	Unknown	
Assay Beads	Normalized Signal	Results
Tetracyclines	18	POS
β-Lactams	37	POS
Sulfonamides	24	POS
(F)Quinolones	12	POS
Aminoglycosides A	99	NEG
Aminoglycosides B	109	NEG
Colistin	99	NEG
Macrolides A	101	NEG
Macrolides B	100	NEG
Lincosamides	9	POS
Pleuromutilins	4	POS
Phenicols	107	NEG
CAP	21	POS

*"The easiest tool to screen for the presence of **antibiotic** residues in the food chain"*

10 ANTIBIOTIC FAMILIES TESTED / SAMPLE

PRODUCT REFERENCE

KIT187
BEADYPLEX
96 tests



unisensor
DIAGNOSTIC ENGINEERING

DEVELOPED IN COOPERATION WITH THE CER GROUPE (MARLOIE BELGIUM)

MKT112-2026-01-05