

# Charm KIS Test

## for Antimicrobial Drug Detection in Kidney Tissue

3  
hours

### Product Overview



Charm KIS Test

The Charm® KIS Test (Kidney Inhibition Swab) is a simple inhibition test for screening broad-spectrum antimicrobial drugs in fresh or frozen/thawed kidney tissue. KIS reagents are self-contained, solvent-free, and pre-measured in a single-use disposable swab format. Results are obtained in approximately 3 hours. Speed, sensitivity, and simplicity give KIS clear advantages over conventional tests used in the meat industry, such as FAST, SOS and STOP tests.

Charm KIS Test is the USDA (US Department of Agriculture) FSIS (Food Safety and Inspection Service) screening test for antimicrobial drugs in bovine, porcine, ovine, caprine and poultry kidney and muscle tissue under the National Residue Program (FSIS notice 50-09). As of December 2012, the KIS Test is the in-plant drug residue screening test in all federally inspected slaughter establishments and for all State MPI (Meat and Poultry Inspection) programs<sup>A</sup>.

<sup>A</sup> USDA, FSIS, CLG-ADD 3.02

#### Charm KIS Test:

- ✓ Detects antimicrobial drugs at or near Kidney Tolerances and MRLs
- ✓ Saves time and labor - Results in approximately 3 hours
- ✓ Functions for HACCP and residue avoidance programs
- ✓ Works for feeds, water, urine, serum and tissue testing
- ✓ Works in laboratory, slaughter house, or on-farm

### Simple Procedure



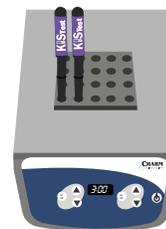
Cut Into Tissue



Absorb Sample



Activate Swab



Incubate



Interpret



## Sensitivity in Kidney<sup>F</sup>

### Concentration of antimicrobial drugs that cause positive results compared to Kidney Tolerances and MRLs

Antimicrobial Drug <sup>A</sup>	Concentration <sup>B</sup> for Positive (ppb <sup>C</sup> )	Kidney US Tolerance (ppb)	Kidney EU MRL <sup>D</sup> (µg/kg)
Penicillin G	30 ppb	50 ppb	50 µg/kg
Oxytetracycline	3,000 ppb	12,000 ppb	600 µg/kg
Tylosin	400 ppb	200 ppb	100 µg/kg
Gentamicin	750 ppb	400 ppb	750 µg/kg
Sulfadimethoxine	250 ppb	100 ppb	100 µg/kg
Sulfamethazine	500 ppb	100 ppb	100 µg/kg
Neomycin	1,000 ppb	7,200 ppb	5,000 µg/kg
Tulathromycin	1,000 <sup>E</sup> ppb	21,000 ppb	3,000 µg/kg

<sup>A</sup> Antimicrobial drugs listed are representative of their respective drug families. Test may detect other members of a drug family. Different analogs will have different sensitivities.

<sup>B</sup> Sensitivity determined by testing unfrozen pork and beef tissue samples (diaphragms) from freshly slaughtered animal and fortifying the swab with antibiotic based on absorbed sample weight. Cautions interpreted as negative.

<sup>C</sup> Parts per billion or µg/kg.

<sup>D</sup> Maximum Residue Limit

<sup>E</sup> Sensitivity to tulathromycin is significantly less than the US Tolerance and EU MRL, however other MRLs range from 1000 to 9000 ppb. Drug specific confirmation of positive test samples should be performed to avoid condemnation of samples containing less than the tolerance or MRL levels

<sup>F</sup> Contact us for other matrices; feed, water, urine, serum, and tissue

## Ordering Info

Order Codes	Each Kit Includes
<b>KIS-25K</b>	25 KIS Swabs
<b>KIS-100K</b>	100 KIS Swabs

See Operator's Manual for additional kits and order codes



659 Andover Street, Lawrence, MA 01843-1032, USA  
**T** +1.978.687.9200 | **F** +1.978.687.9216 | **E** info@charm.com | **www.charm.com**

© 2015 Charm Sciences, Inc. Charm is a registered trademark of Charm Sciences, Inc.

MRK-083-004 Dec-2015