

**“At Least Equal to” Compliance Guideline for State Meat and Poultry Inspection (MPI) Programs
for Residue Testing**

Table of Contents

I. Purposepage 2

II. Background.....page 2

III. In-Plant Testing Using the KISpage 2

IV. Ordering KIS™ Test Supplies for State MPI Programs.....page 3

V. Training.....page 4

VI. Additional Information.....page 4

VII. Reference.....page 4

I. Purpose

This guidance addresses in-plant screening of residues in meat and poultry products. The Food Safety and Inspection Service (FSIS) is now using the Kidney Inhibition Swab (KIS™) as its in-plant drug residue screening test. Effective August 19, 2012, the Agency discontinued the use of the Fast Antimicrobial Screen Test (FAST) to detect antimicrobial drug residues in all livestock in federally inspected slaughter establishments. For this reason, to meet “at least equal to” standards, State MPI programs are required to discontinue their use of the FAST and switch to the KIS™ test.

II. Background

In 1994, FSIS started using the FAST in-plant residue screening test to detect antimicrobial residues in animal tissues.

An FSIS review of the FAST sampling data results from federally inspected establishments suggested that in-plant screening procedures could be enhanced to provide additional public health protection.

To accomplish this initiative, FSIS decided to upgrade the manner in which residues are tested through the use of the KIS™ test. The KIS™ test is a simple-to-use antibiotic detection test for use on kidney tissue. The test can be performed on fresh or thawed kidneys and can be performed by inspection program personnel (IPP), who can also read the results in as little as 3 hours, with the test results remaining stable up to 16 hours.

The KIS™ test shows better detection capabilities than FAST for certain drugs, and it can screen for additional compounds, such as Tilmicosin, Tulathromycin, and Bacitracin. Also, the KIS™ test can detect residues of certain drugs – including Penicillin G, Neomycin, and Sulfonamides -- at levels closer to their U.S. tolerances than the FAST. In addition to its greater detection capability, the KIS™ test is easier to use in the plant and produces more consistent results, compared to those yielded by the FAST.

The [KIS™ Test Instructions](http://www.fsis.usda.gov/PDF/KIS_Booklet_0710.pdf) booklet contains information on the testing supplies needed and instructions on how to perform the test. The booklet is available on the FSIS website using the following link: http://www.fsis.usda.gov/PDF/KIS_Booklet_0710.pdf.

III. In-Plant Testing Using the KIS™ Test

To be “at least equal to” the Federal inspection program, State MPI programs must conduct inspector-generated in-plant residue screening tests in accordance with current FSIS policies that provide instruction on the type and use of current testing methods. On June 26, 2012, the Agency informed IPP that it was extending the process for replacing FAST with the KIS™ test in all federally inspected livestock slaughter establishments to August 19, 2012. MPI programs will stop using FAST by January 31, 2013. After December 31, 2012, FSIS will no longer produce the FAST plates nor provide FAST supplies for MPI programs. In addition, after this date, FSIS will not accept FAST plates that are prepared from outside sources.

State MPI programs that historically run an average of more than one FAST per week need to obtain training materials on performing the KIS™ test and purchase KIS™ test supplies and equipment for each slaughter establishment. For these establishments, State MPI personnel will conduct the KIS™ test and send the KIS™ test positive samples to the FSIS Midwestern Laboratory (MWL) for confirmation.

**“At Least Equal to” Compliance Guideline for State Meat and Poultry Inspection (MPI) Programs
for Residue Testing** **December 2012**

State-inspected slaughter establishments that historically run an average of less than one FAST per week will need to submit samples of kidney, liver and muscle from animals suspected of having violative residues directly to the MWL at no cost to the State rather than to a central in-State laboratory. The State MPI program will contact MWL first when it has a sample to be forwarded for residue testing. The MWL, in turn, will send three to five boxes (with FedEx air bills) as the State identifies its sample submission needs. The MWL will return the shipping containers that contained the packaged samples to the State along with fresh supplies for future sample shipments.

It is acceptable for slaughter establishments that historically run an average of less than one FAST per week to purchase a Digital Dry Block Heater that holds up to four tests, instead of 20.

IV. Ordering KIS™ Test Supplies for State MPI Programs

To perform the KIS™ test , State MPI programs will need the following supplies:

1. Digital Dry Block Heater (tests up to 20 units);
2. KIS™ (Kidney Inhibition Swab) Tests;
3. Negative Controls;
4. 15 ml Tube of Deionized or Distilled Water (or equivalent);
5. Timer;
6. Transfer Pipettes or equivalent device for delivering 1ml of water; and
7. Test Tube Rack (or equivalent device) to hold KIS™ tests.

State MPI programs can order the following KIS™ test supplies directly from the vendor, Charm Sciences, Inc. (telephone number 1-800-343-2170):

- Digital Dry Block Heater (holds up to 20 tests)(Order Code INC-20-110);
- KIS™ (Kidney Inhibition Swab) Tests (units of 25) (order code KIS-100);and
- Negative Controls (units of 4) (Order Code NCKIS-4).

The ancillary testing supplies listed above (items 4 – 7) can be purchased by State MPI programs through a general laboratory supply vendor.

V. Training

FSIS will make training materials with instructions on performing the KIS™ test available to State MPI programs. Instructional materials, entitled “Performing the KIS™ Test,” are available in both CD-ROM and written formats. The KIS™ Test Instructions booklet is also available in hard copy, upon request. Requests for KIS™ Test training materials should be sent to CEDL@fsis.usda.gov. States are to include the contact person, phone number and return address for shipment of training materials.

VI. Additional Information

Questions regarding KIS™ testing can be submitted through [askFSIS](http://askfsis.custhelp.com/) using the following link:
<http://askfsis.custhelp.com/>

When submitting a question, use the **Submit a Question** tab, and enter the following information in the fields provided:

Subject Field: Enter **KIS testing**
Question Field: **Enter your question with as much detail as possible.**
Product Field: Select **General Inspection Policy** from the drop-down menu.
Category Field: Select **Sampling - General** from the drop-down menu.
Policy Arena: Select **Domestic (U.S.) Only**

When all fields are complete, press the **Submit** button.

Additional information on KIS™ testing is available in the series of [askFSIS](#) Q&As and can be found on the askFSIS web page and by entering “KIS” in the search feature:

VII. Reference

FSIS [“At Least Equal To” Compliance Guidelines for State Meat and Poultry Cooperative Inspection Programs](#) (July 2008)