

AuroFlow™ Kits

Lateral Flow Strip Tests



Rapid Screening of Antibiotic Residues in Milk

Rapid Screening of Antibiotic Residues in Milk – No Incubator Needed!

Perten Instruments has worked with the dairy industry for many years. We are pleased that we are now able to offer the Auroflow kit, developed by Bioo Scientific, a sister company in the PerkinElmer group. Bioo Scientific has unique expertise. The combination of technologies, applications, methods, and expertise for milk and dairy product analysis is unparalleled.

The Bioo Scientific Auroflow™ Test Kits allow you to quickly and efficiently test milk for antibiotic residues and are backed by years of experience. Make purchasing decision on the spot ensuring the safety and quality of your milk. The kits are simple to use and require minimal training.

AuroFlow™ Strip Tests

- Easy-to-use strip test with no required heating step/or incubator
- Works with room temperature or cold milk
- Results in only 7 minutes
- Results easy to interpret visually or by use of QuickSTAR™ Strip Reader
- Ideal for use in the field or farm; requires no equipment

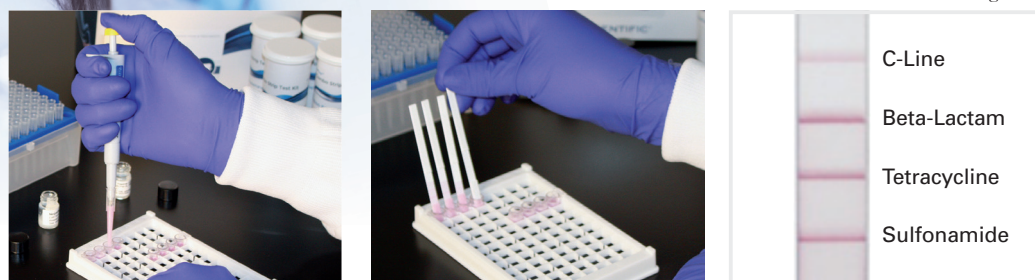
AuroFlow™ Beta-Lactam Strip Test Kit*

AuroFlow™ BT Combo Strip Test Kit*

AuroFlow™ BTS Combo Strip Test Kit*

**Available in 96 or 192 strip kits.*

Figure 1



1. Pipet milk into sample well. Mix well. Incubate at RT for 3 min.

2. Insert dipstick into sample well. Allow sample to flow dipstick for 4 min.

3. Read results.

**Strip
Test
Protocol**

AuroFlow™ Strip Tests

Orientation & Interpretation of Results

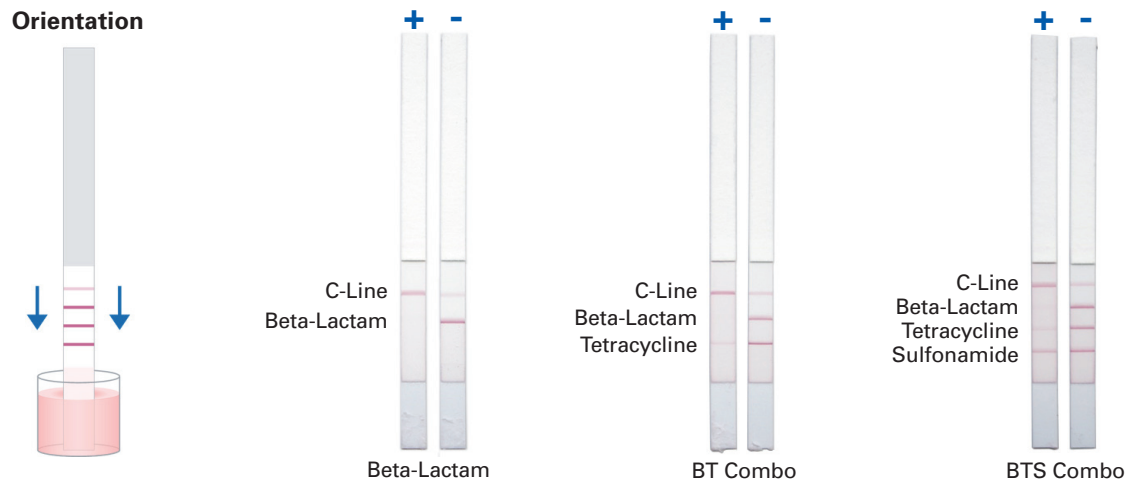


Figure 2

Simple Interpretation of Results

When the signal at the T-line is more intense than the signal at the C-line, the milk sample is negative for presence of residues. A signal at the T-line which is equal to or less intense than the signal at the C-line indicates a contaminated milk sample.

The **AuroFlow™** lateral flow test strips are designed for the detection of a broad range of antibiotics in raw, commingled cow's milk. These rapid tests detect 14 beta-lactam antibiotics (Table 1), major tetracyclines (Table 2) and 11 major sulfonamides (Table 3) in milk at or below EU and CODEX Maximum Residue Limits (MRL).

The **combo kits** allow simultaneous detection of different classes of antibiotic residues. The AuroFlow™ BTS Combo Kit can detect more antibiotics at or below the MRL, compared to any available competitor kit.

These **state-of-the-art tests** also use novel binding proteins which eliminate the need for a heating block. Validation reports are available showing the efficacy of the tests in both room temperature and cold milk. The fast, simplified protocol can be seen below (Figure 1).

Detection Limits for Beta-lactam Antibiotics

Substance (MRL)	Parameter
Penicillin G (4)	2-3 ppb
Ampicillin (4)	3-4 ppb
Amoxicillin (4)	3-4 ppb
Oxacillin (30)	4-8 ppb
Cloxacillin (30)	4-8 ppb
Dicloxacillin (30)	5-8 ppb
Nafcillin (30)	15-30 ppb
Cephquinome (20)	10-20 ppb
Ceftiofur (100)	75-100 ppb
Cefazolin (50)	35-50 ppb
Cephapirin (60)	6-15 ppb
Cephalonium (20)	4-8 ppb
Cefaperazone (50)	5-20 ppb
Cefacetile (125)	30-50 ppb

Table 1

Detection Limits for Tetracycline Antibiotics

Substance (MRL)	Detection Range (µg/L)
Tetracycline (100)	50-100 ppb
Oxytetracycline (100)	50-70 ppb
Chlorotetracycline (100)	15-50 ppb
Doxycycline (0)	5-20 ppb

Table 2

Detection Limits for Sulfonamide Antibiotics

Substance (MRL)	Detection Range (µg/L)
Sulfamethazine (100)	25-50 ppb
Sulfamethoxazole (100)	50-100 ppb
Sulfadiazine (100)	10-20 ppb
Sulfathiazole (100)	50-100 ppb
Sulfadimethoxine (100)	50-100 ppb
Sulfaquinoxaline (100)	75-100 ppb
Sulfapyridine (100)	5-10 ppb
Sulfamethoxyipyridazine (100)	10-15 ppb
Sulfamerazine (100)	25-50 ppb
Sulfachloropyridazine (100)	80-100 ppb
Sulfamonomethoxine (100)	5-10 ppb

Table 3

Optional, Ruggedized Lateral Flow Testing System

The **QuickSTAR™ Strip Test Reader** is a patented ruggedized handheld lateral flow testing system that provides rapid quantitative assay results and increases testing throughput and efficiency. The unit features a rechargeable lithium battery, a touchscreen menu driven interface, and provides users test results in less than 10 seconds. The unit is compatible with a wide array of pre-programmed test types and is software upgradeable to accommodate additional assays. All results including the actual test and control line images are saved and can be automatically transferred to a desktop computer using the supplied Data Manager Software Suite. This Strip Reader has been approved for use with all of Bioo Scientific's AuroFlow™ Strip Tests.



Features and Benefits

- Increase testing throughput and efficiency with the ability to automatically test > 300 assays per hour with a single unit
- Eliminate costly false positives and negatives by automatically determining results
- Archive and track test results trends over time to improve QA/QC and meet new government testing standards
- Reduce retesting, supply and reagent waste

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