

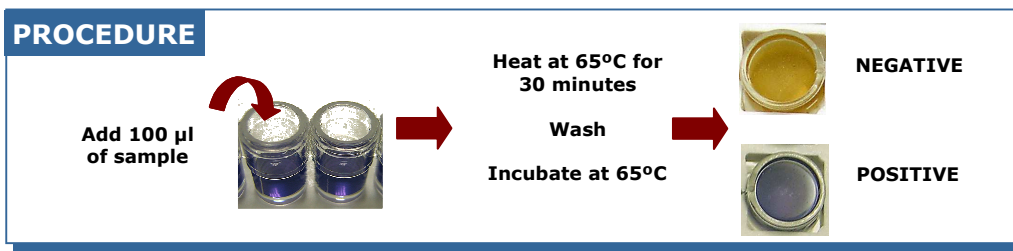
Test for detection of inhibitory substances in foods

Food contaminated with antibiotic residues should be prevented from reaching the consumer. These residues can develop bacterial resistance and cause allergic reactions in humans, as well as alter the fermentation processes in meat products.

The detection of antibiotics is compulsory and levels should comply with the Maximum Residue Limits (MRL) state by the European Union.

The European Four Plate test is commonly used for detection of antibiotics in food. This method is tedious, requires stabilisation of several bacteria strains and takes about 24 hours to produce results. Moreover, the sensitivity of this assay is well above the MRL for sulfonamides.

EXPLORER is a simple and fast kit for detection of inhibitory substances in raw meat, liver, kidney, feed and eggs. The test, a 40 or 96-well microtiter plate, is based on the inhibition of microbial growth. A redox indicator produces a colour change in the test when antibiotics are not present in the sample.



- ◆ **Simple and fast: Results in ≤ 4 hours**
- ◆ **Detection of a broad range of antibiotics**
- ◆ **Friendly format: Microtiter plate with single tests**
- ◆ **Visual and photometric reading of results**
- ◆ **Optimized for different meat species: Pork, chicken, beef, lamb,...**
- ◆ **Suitable for various food matrices: raw meat, liver, kidney, feed and eggs**

ANTIBIOTICS	Limit of Detection
Docycline	0.150
Oxytetracycline	0.700
Erythromycin	0.200
Tylosin	0.080
Gentamicin	0.400
Neomycin	0.300
Sulfadiazine	0.200
Sulfamethoxipiridazine	0.300
Sulfathiazole	0.100
Florphenicol	2.000
Enrofloxacin	2.000
Lincomycin	0.500

Table. Limit of detection (µg/ml) in beef muscle samples for some of the most used antibiotics.