



# EuroProxima

Close to your analysis

## ERYTHROMYCIN ELISA (5151ERY)

### General

Erythromycin is an antibiotic with a broad spectrum activity, which belongs to the group of macrolides. Maximum Residue Limits (MRLs) for erythromycin for all food producing species are established in Europe: for tissue at 200 ppb, milk at 40 ppb and eggs at 150 ppb.

The screening for tylosin and erythromycin is an important tool for control in the honey industry. The use of antibiotics in apiculture is forbidden. Therefore, no MRLs have been set for honey. Nevertheless, Recommended Concentrations (RCs) have been published by the European Union Reference Laboratories. For erythromycin the RC is 20 ppb.

The **Erythromycin ELISA** is a competitive enzyme immunoassay based on antibodies directed against erythromycin.

### Kit characteristics

#### **Microtiter plate:**

96 Wells  
12 x 8 Breakapart

#### **Antibody cross-reactivity:**

Erythromycin	100%
Erythromycin ethylsuccinate	12%
Tylosin	0%
Spiramycin	0%

#### **Conjugate:**

Erythromycin-HRP stabilized

#### **Standard range (ready-to-use):**

0, 0.375, 0.75, 1.5, 3 and 6 ng/ml

### Assay characteristics

<b>Matrices</b>	<b>LOD (ppb)</b>
Milk	4
Honey	10
Egg	10
Shrimps	10
Fish	10
Liver	10
Urine	4

The Limit of detection (LOD) is calculated as:  $X_n + 3SD$  and is determined under optimal conditions.

#### **Sample preparation**

For milk, honey, egg, shrimps, fish, liver and urine fast and efficient extraction methods are included in the kit manual.

#### **Procedure**

Antibody, conjugate and standard/sample are pipetted into the wells and incubated for 1 hour at 4°C. After a washing procedure ready-to-use substrate is added and incubated for 30 minutes at 20°C - 25°C. The reaction is stopped and the absorbance is read in a spectrophotometer at 450 nm.

EuroProxima's user-friendly software converts the measured optical density into the concentration of the metabolite in the starting material.