



**EuroProxima**  
Close to your analysis

## OXYTETRACYCLINE ELISA (5091OTC)

### General

Tetracyclines are a group of antibiotics derived from *Streptomyces* spp. with a broad spectrum activity. The most commonly used tetracyclines in veterinary medicine are tetracycline (TC), oxytetracycline (OTC), chlortetracycline (CTC) and doxycycline (DC).

In many countries in the world legislation has become in force to control the use of OTC in aquacultural products like salmon, pangasius and shrimps. Furthermore, the use of OTC in the honey industry has to be controlled.

The **Oxytetracycline ELISA** is a competitive enzyme immunoassay based on antibodies directed against oxytetracycline.

### Kit characteristics

**Microtiter plate:**

96 Wells  
12 x 8 Breakapart

**Antibody cross-reactivity:**

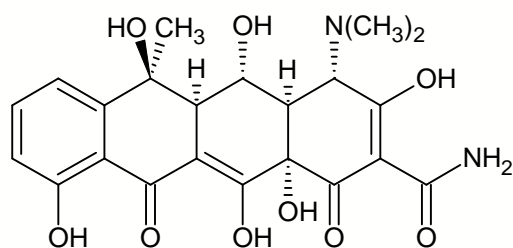
Oxytetracycline	100%
Tetracycline	133%
Chlortetracycline	138%
Doxycycline	54%

**Conjugate:**

Tetracycline-HRP stabilized

**Standard range**

0, 0.078, 0.156, 0.3125, 0.625, 1.25 and 2.5 ng/ml



Chemical structure of oxytetracycline

### Assay characteristics

**Matrices**

Honey  
Shrimps/fish

**LOD (ppb)**

5  
2

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

**Sample preparation**

For honey and shrimps/fish fast and efficient methods are included in the kit manual.

**Procedure**

Antibody, conjugate and standard/sample are pipetted into the wells and incubated for 1 hour at 20°C - 25°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.