



**EuroProxima**  
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## COLISTIN ELISA (5151COL)

### General

Colistin A and B are polypeptide antibiotics that have been used in medicine and veterinary for over 50 years. The European Medicines Agency has proposed to reduce the use of the antibiotic drug colistin in food producing animals. For several food matrices maximum residue limits (MRLs) for colistin are set in the European Union: 150 µg/kg for muscle, fat and liver; 200 µg/kg for kidney, 50 µg/kg for milk; 300 µg/kg for eggs.

The **Colistin ELISA** is a competitive enzyme immunoassay based on specific antibodies directed against colistin.

### Kit characteristics

#### **Microtiter plate:**

96 Wells  
12 x 8 Breakapart

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

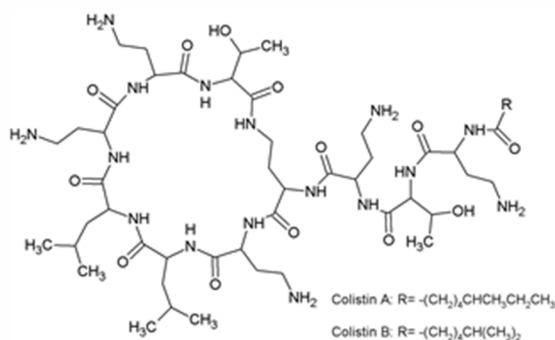
Colistin A and B	100%
Polymyxin B1 and B2	100%
Bacitracin	<0.1%

#### **Conjugate:**

Colistin-HRP stabilized

#### **Standard range**

0.125, 0.25, 0.5, 1.0, 2.0, 4.0 ng/ml



Chemical structure of colistin A and B

### Assay characteristics

#### **Matrices**                      **LOD (ppb)**

Milk	4
Eggs	22
Chicken	12
Pork	8
Beef	15
Liver	21
Fish	12
Feed	24

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

#### **Sample preparation**

For milk, egg, chicken, pork, beef, liver, fish and feed fast and efficient extraction methods are included in the kit manual.

#### **Procedure**

Conjugate and standard/sample are pipetted into the pre-coated wells and incubated for 30 minutes at 20°C to 25°C. After a washing procedure ready-to-use substrate is added and incubated for 30 minutes at 20°C to 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.