



# Cimaterol ELISA Kit

10/19

(Catalog # E4771-100; 96 assays, Storage at 4°C)

## I. Introduction:

Cimaterol is a chemically stable nonselective agonist  $\beta$ 1-,  $\beta$ 2-, and  $\beta$ 3-adrenoceptors. Cimaterol is used in sport as a stimulant and a fat burner that assists bodybuilders and strength athletes to get rid of body fats. Cimaterol has been used in farmed animals (swine, fowl, etc.) to increase carcass mass and to alter muscle and fat deposition. BioVision's Cimaterol ELISA Kit is based on the Competitive ELISA method. It can detect Cimaterol in Tissue, Urine and Feed samples. The microtiter plate provided in the kit has been pre-coated with Cimaterol. During the reaction, Cimaterol in the samples or standard competes with coated Cimaterol for anti-Cimaterol antibody. Then Horseradish Peroxidase (HRP) conjugate is added to each microtiter plate well, and TMB substrate is added for color development. There is a negative correlation between the OD value of samples and the concentration of Cimaterol. The concentration of Cimaterol in the samples can be calculated by comparing the OD of the samples to the standard curve.

## II. Applications:

*In vitro*, quantitative determination of Cimaterol

**Detection Range:** Urine - 0.3 ppb, Tissue (low detection limit method) - 1.2 ppb, Tissue (high detection limit method) - 0.3 ppb, Feed- 3 ppb.

**Sensitivity:** 0.3 ppb (ng/mL)

**Sample recovery rate:** Urine - 95%±10%, Tissue, Feed- 85%±15%.

**Cross-reactivity:** Clenbuterol - 100%, Arubendol - <1%, Mabuterol - <1%, Brombuterol - <1%, Salbutamol - <1%, Ractopamine- <1%.

## III. Sample Type:

Tissue, Urine, Feed

## IV. Kit Contents:

Components	E4771-100	Part Number
Micro ELISA Plate	96 wells	E4771-100-1
Standard	6 X 1 ml	E4771-100-2
HRP Conjugate	5.5 ml	E4771-100-3
Antibody Working Solution	5.5 ml	E4771-100-4
Substrate Reagent A	6 ml	E4771-100-5
Substrate Reagent B	6 ml	E4771-100-6
Stop Solution	6 ml	E4771-100-7
Wash Buffer (20X)	40 ml	E4771-100-8
Reconstitution Buffer (10X)	50 ml	E4771-100-9
Plate Sealer	3	E4771-100-10

## V. User Supplied Reagents and Equipment:

- Microplate reader capable of measuring absorbance at 450 nm
- HCl, Acetonitrile, NaOH
- Clean Eppendorf tubes for preparing standards or sample dilutions

## VI. Storage and Handling:

Store at 4°C.

## VII. Reagent and Sample Preparation:

Bring all reagents to room temperature before use. Before using the kit, spin tubes and bring down all components to the bottom of tubes.

- **Wash Buffer (20X):** Dilute 20X Concentrated Wash Buffer to 1X with deionized water.
- **Reconstitution Buffer (10X):** Dilute 10X Reconstitution Buffer with deionized water. Mix 10x Reconstitution Buffer (V): Deionized water (V) =1:9). The Reconstitution buffer can be store at 4°C for a month.
- **Standard:**

Standard	S1	S2	S3	S4	S5	S6
Concentration (ppb)	0	0.3	0.6	1.2	2.4	4.8

### Solution preparation

- **0.1 M HCl:** Dilute 0.86 mL Concentrated HCl with deionized water to 100 ml.
- **0.1 M NaOH :** Dissolve 0.4 g NaOH with 100 ml deionized water





Concentration of standard (ppb)	OD-1	OD-2	Average OD
0	2.7721	2.7414	2.7568
0.3	2.1215	2.1519	2.1367
0.6	1.7033	1.7071	1.7052
1.2	1.1203	1.1087	1.1145
2.4	0.5717	0.6012	0.5865
4.8	0.2651	0.2844	0.2748

**XI. RELATED PRODUCTS:**

- Enrofloxacin (ENR) ELISA Kit (E4277)
- Chloramphenicol (CAP) ELISA Kit (K4230)
- Gentamicin ELISA Kit (K4206)
- Ciprofloxacin (Cipro) ELISA Kit (E4365)

***FOR RESEARCH USE ONLY! Not to be used on humans.***