

Human Cortisol ELISA Kit

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CATALOG #
AAA174689

REACTIVITY
Human

PRODUCT SYNONYMS

Cortisol; Human Cortisol ELISA Kit; Cortisol elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	This kit recognizes Cortisol in samples. No significant cross-reactivity or interference between Cortisol and analogues was observed.
Samples	Bovine And Sheep Serum, Plasma
Assay Type	Quantitative Competitive
Detection Range	1.56-100ng/mL
Sensitivity	0.96ng/mL.
Intra-assay Precision	Intra-assay Precision (Precision within an assay): 3 sheep samples with low, mid range and high level Cortisol were tested 20 times on one plate, respectively
Inter-assay Precision	Inter-assay Precision (Precision between assays): 3 sheep samples with low, mid range and high level Cortisol were tested on 3 different plates, 20 replicates in each plate.
Preparation and Storage	Store at 4 degree C.

ADDITIONAL INFORMATION

Related Product Information for Cortisol elisa kit

Intended Uses: This ELISA kit applies to the in vitro quantitative determination of Cortisol concentrations in Bovine and Sheep serum, plasma. Please contact tech-support for other sample type detection.

Principle of the Assay: This ELISA kit uses the Competitive-ELISA principle. The micro ELISA plate provided in this kit has been pre-coated with Cortisol. During the reaction, Cortisol in the sample or standard competes with a fixed amount of Cortisol on the solid phase supporter for sites on the Biotinylated Detection Ab specific to Cortisol. Excess conjugate and unbound sample or standard are washed from the plate, and Avidin conjugated to Horseradish Peroxidase (HRP) are added to each microplate well and incubated. Then a TMB substrate solution is added to each well. The enzyme-substrate reaction is terminated by the addition of stop solution and the color change is measured spectrophotometrically at a wavelength of 450 nm +/- 2 nm. The concentration of Cortisol in the samples is then determined by comparing the OD of the samples to the standard curve!!Background/Introduction: Cortisol is often called the "stress hormone" because of its connection to the stress response, however, cortisol is much more than just a hormone released during stress. Cortisol is one of the steroid hormones and is made in the adrenal glands. Secretion of the hormone is controlled by the hypothalamus, the pituitary gland, and the adrenal gland, a combination glands often referred to as the HPA axis. Because most bodily cells have cortisol receptors, it affects many different functions in the body. Cortisol can help control blood sugar levels, regulate metabolism, [1] help reduce inflammation, and assist with memory formulation. It has a controlling effect on salt and water balance and helps control blood pressure. In women, cortisol also supports the developing fetus during pregnancy. Low cortisol levels can cause a condition known as primary adrenal insufficiency or Addison disease. While rare, primary adrenal insufficiency is an autoimmune disease that causes damage to the adrenal glands Cortisol reduces bone formation, favoring long-term development of osteoporosis. It transports potassium out of cells in exchange for an equal number of sodiumions. This can trigger the hyperkalemia of metabolic shock from surgery. Cortisol also reduces calcium absorption in the intestine [2].

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/human-elisa-kits/cortisol/174689>