Corticosterone ELISA kit
ADI-901-097
Highly sensitive corticosterone ELISA kit, species independent, used for animal stress research.

Product Number/Sizes
ADI-901-097 5x96 wells
Alternative size available: ADI-900-097 (1x96 wells)

- Sensitive measurement of Corticosterone, detecting as little as 27 pg/ml
- High throughput format with results in < 3 hours for up to 39 samples
- Broad dynamic range
- Species independent
- Routinely used to monitor stress levels in zoo animals
- Save with bulk kit package!

The Corticosterone EIA kit is a colorimetric competitive enzyme immunoassay kit with results in 3 hours. Absorbance is read at 405 nm. The Corticosterone EIA kit has low cross-reactivity with related steroids. The broad dynamic range makes this kit ideal for a wide variety of sample matrices from any species.

Product Specifications
SENSITIVITY: 27.0 pg/ml (range 32 - 20,000 pg/ml)
ASSAY TIME: 3 hours
APPLICATIONS: ELISA, Colorimetric detection
APPLICATION NOTES: For the quantitative determination of Corticosterone in culture supernatants, feces, plasma, serum, and saliva from any species. Cited sample types include cell lysate, urine and whole blood.
SPECIES REACTIVITY: Species independent
CROSSREACTIVITY:
- Corticosterone (100%), Deoxycorticosterone (21.3%), Desoxycorticosterone (21.0%), Progesterone (0.46%), Testosterone (0.31%), Tetrahidro corticosterone (0.28%), Aldosterone (0.18%), Cortisol (0.046%) and <0.03%: Pregnenolone, Estradiol, Cortisone, 11-dehydrocorticosterone acetate

SHIPPING: Blue Ice Not Frozen
LONG TERM STORAGE: +4°C
CONTENTS:
- DxS Microtiter plate, Conjugate, Antibody, Assay buffer 15 concentrate, Wash buffer concentrate, Standard, pNpp Substrate, Stop solution, Steroid displacement reagent

SCIENTIFIC BACKGROUND:
Corticosterone is a glucocorticoid secreted by the cortex of the adrenal gland. Corticosterone is produced in response to the stimulation of the adrenal cortex by adrenocorticotropic hormone (ACTH) and is the precursor of aldosterone. Corticosterone production has been shown to increase with stress, with elevated corticosterone levels being associated with impairment of long term memory retrieval and following burn injury. In addition to stress levels, corticosterone is believed to play a decisive role in sleep-wake patterns.

TECHNICAL INFO/PRODUCT NOTES: For an overview of cited samples, please click here
PROTOCOL:

Suggested Small Volume Protocol for Serum/Plasma Samples

- Let all solutions come to room temp before use.
- Aliquot 10µl of each sample into microfuge tube.
- Make 1ml 1:100 Steroid Displacement Reagent (SDR) solution (immediately before use) in deionized water or PBS (not assay buffer)
- Add 10µl 1:100 SDR to each sample tube.
- Vortex, let stand >5 minutes before diluting with EIA buffer.
- Add 380µl EIA assay buffer to each plasma tube, vortex.
Final dilution is ~1:40 (This final dilution may not be appropriate for every sample; thus, optimal dilution must be determined by each end user for their experimental sample group.)

Product Literature References
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Vibrissal paralysis produces increased corticosterone levels and impairment of spatial memory retrieval W.E. Patarroyo, et al. Behav Brain Res. 320 58 (2016)


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Repeated exposure to stressful conditions can have beneficial effects on survival V. Marasco, et al. Exp. Gerontol. 69 170 (2015)


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