

Datasheet for ABIN1326899

Testosterone ELISA Kit

5 Publications

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Overview

Quantity: 96 tests

Target: Testosterone

Reactivity: Rat, Mouse

Method Type: Competition ELISA

Application: ELISA

Product Details

Purpose: The Testosterone EIA is based on the principle of competitive binding between Testosterone in the test specimen and Testosterone-HRP conjugate for a constant amount of rabbit anti-Testosterone. In the incubation, goat anti-rabbit IgG-coated wells are incubated with 25µl of Testosterone standards, controls, patient samples, 100 µl Testosterone-HRP conjugate reagent and 50µl rabbit anti-Testosterone reagent at room temperature 60 minutes. During the incubation, a fixed amount of HRP-labeled Testosterone competes with the endogenous Testosterone in the standard, sample, or quality control serum for a fixed number of binding sites of the specific Testosterone antibody. Thus, the amount of Testosterone peroxidase conjugate immunologically bound to the well progressively decreases as the concentration of Testosterone in the specimen increases. Unbound Testosterone peroxidase conjugate is then removed and the wells washed. Next, a solution of TMB Reagent is then added and incubated at room temperature for 15 minutes, resulting in the development of blue color. The color development is stopped with the addition of stop solution, and the absorbance is measured spectrophotometrically at 450nm.

Sample Type: Serum

Analytical Method: Qualitative

Product Details

Detection Method: Colorimetric

Target Details

Target: Testosterone

Abstract: [Testosterone Products](#)

Target Type: Hormone

Background: Testosterone (17b-hydroxyandrost-4-ene-3-one) is a C19 steroid with an unsaturated bond between C-4 and C-5, a ketone group in C-3 and a hydroxyl group in the bposition at C-17. This steroid hormone has a molecular weight of 288.4. Testosterone is the most important androgen secreted into the blood. In males, testosterone is secreted primarily by the Leydig cells of the testes in females ca. 50% of circulating testosterone is derived from peripheral conversion of androstenedione, ca. 25% from the ovary and ca. 25% from the adrenal glands. Testosterone is responsible for the development of secondary male sex characteristics and its measurements are helpful in evaluating the hypogonadal states. In women, high levels of testosterone are generally found in hirsutism and virilization, polycystic ovaries, ovarian tumors, adrenal tumors and adrenal hyperplasia. In men, high levels of testosterone are associated to the hypothalamic pituitary unit diseases, testicular tumors, congenital adrenal hyperplasia and prostate cancer. Low levels of testosterone can be found in patients with the following diseases: Hypopituitarism, Klinefelter

Application Details

Plate: Pre-coated

Restrictions: For Research Use only

Handling

Storage: 4 °C

Publications

Product cited in: Hofer, Cheng, Bury, Xu, Hong, Kaplan, Sharma: "Androgen supplementation in rats increases the inflammatory response and prolongs urethral healing." in: **Urology**, Vol. 85, Issue 3, pp. 691-7, (2015) ([PubMed](#)).

Mirza, Ritzel, Xu, McCullough, Liu: "Sexually dimorphic outcomes and inflammatory responses

in hypoxic-ischemic encephalopathy." in: **Journal of neuroinflammation**, Vol. 12, pp. 32, (2015) ([PubMed](#)).

Johnston, Salmon, Su, Lu, Ailawadi, Upchurch: "Aromatase is required for female abdominal aortic aneurysm protection." in: **Journal of vascular surgery**, Vol. 61, Issue 6, pp. 1565-74.e1-4, (2015) ([PubMed](#)).

Mohamed, Karam, Hagrass, Amer, Abd El-Haleem: "Anti-apoptotic effect of spermatogonial stem cells on doxorubicin-induced testicular toxicity in rats." in: **Gene**, Vol. 561, Issue 1, pp. 107-14, (2015) ([PubMed](#)).

Constantinou, Mpatoulis, Natsos, Petropoulou, Zvintzou, Traish, Voshol, Karagiannides, Kypreos: "The low density lipoprotein receptor modulates the effects of hypogonadism on diet-induced obesity and related metabolic perturbations." in: **Journal of lipid research**, Vol. 55, Issue 7, pp. 1434-1447, (2014) ([PubMed](#)).