

Product datasheet

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ARG80867 Testosterone ELISA Kit

Package: 96 wells Store at: 4°C

Summary

Product Description An Enzyme Immunoassay for the quantification of free active testosterone in saliva. Measurement of

testosterone is used in the research of disorders involving the male sex hormones (androgens), including primary and secondary hypogonadism, delayed or precocious puberty, impotence in males and in females hirsutism (excessive hair) and virilization (masculinization) due to tumors, polycystic

ovaries, and adrenogenital syndromes.

Tested Reactivity All

Tested Application ELISA

Target Name Testosterone

Conjugation HRP

Conjugation Note Substrate: TMB and read at 450 nm

Sensitivity 2.2 pg/ml

Sample Type Saliva.

Standard Range 10 - 1,000 pg/ml

Sample Volume $100~\mu l$

Application Instructions

Assay Time 60 min (shaking), 30 min

Properties

Form 96 well

Storage instruction Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test

reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual

for detail temperatures of the components.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Full Name Testosterone

Background Measurement of testosterone is used in the diagnosis and treatment of disorders involving the male

sex hormones (androgens), including primary and secondary hypogonadism, delayed or precocious puberty, impotence in males and in females hirsutism (excessive hair) and virilization (masculinization)

due to tumors, polycystic ovaries, and adrenogenital syndromes.

At present, the majority of steroid hormone determinations are conducted from serum samples, even if results in the low or very low concentration range are expected, for example, in elderly patients. This is a real challenge for any diagnostic laboratory as shown by Taieb et al in 2003 and others. Recently there has been an official position statement of the Endocrine Society stating that reliable Testosterone measurements in serum either need an extraction step or have to be done by chromatographic

methods like Tandem MS or GCMS. There now is sufficient evidence that the commercial Testosterone assays are unable to quantify low concentrations in a reliable way.

Another major problem associated with the measurement of free hormone levels from serum is the episodic secretion pattern of steroid hormones. Even in 1973 it could be shown that steroid secretion shows a significant episodic pattern. Nevertheless, the majority of the determinations are still made from just one serum sample, resulting in non-reproducible values due to the biological variation. In general, serum measurements can only give the total steroid hormone concentration, whereas saliva testing results in the measurement of the free active hormone fraction.

So far, all attempts for a direct quantification of free Testosterone in serum or plasma samples by commercial immunoassays have failed.

Taking into consideration the above mentioned drawbacks of the current analytical procedures, salivary testing seems to be a reliable alternative. It has been shown in the literature that the measurement of free salivary Testosterone gives clinically valid results even in the low concentration range. In salivary testing it is easy to compensate for the episodic secretion pattern provided multiple sampling is done (preferably 5 samples within 2 hours). The measurement of free Testosterone is done with a mixture of these 5 samples. In contrast to this, measurements from just one single saliva sample always will give arbitrary results (like in serum).

Highlight

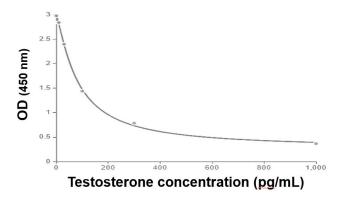
Related products:

<u>Testosterone antibodies; Testosterone ELISA Kits;</u> New ELISA data calculation tool: Simplify the ELISA analysis by GainData

Research Area

Developmental Biology kit; Signaling Transduction kit

Images



ARG80867 Testosterone ELISA Kit standard curve example image

The representative standard curve of ARG80867 Testosterone ELISA Kit. The standard curve is for demonstration only and cannot be used in place of data generations at the time of assay. The standard curve should be generated each time the assay is performed.