Datasheet for ABIN4948061

Testosterone CLIA Kit

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Overview

Quantity:	96 tests
Target:	Testosterone
Reactivity:	Various Species
Method Type:	Competition ELISA
Detection Range:	58.6 pg/mL - 15000 pg/mL
Minimum Detection Limit:	58.6 pg/mL
Application:	ELISA

Product Details

Purpose:	CLIA Kit for Testosterone (Testo)
Sample Type:	Plasma, Serum
Analytical Method:	Quantitative
Detection Method:	Chemiluminescent
Specificity:	This assay has high sensitivity and excellent specificity for detection of Testosterone (Testo). No significant cross-reactivity or interference between Testosterone (Testo) and analogues was observed.
Sensitivity:	24.2 pg/mL
Components:	• Pre-coated, ready to use 96-well strip plate • Plate sealer for 96 wells • Standard • Standard Diluent

Product Details

	• Assay Diluent A • Assay Diluent B • Standard • Detection Reagent A • Detection Reagent B • Substrate A • Substrate B • Wash Buffer (30 x concentrate) • Instruction manual
Material not included:	• Luminometer capable of reading 96-well microplates with the following parameters: lag time 30.0s, read time 1.0 s/well . • Precision single or multi-channel pipettes and pipette tips with disposable tips. • Eppendorf Tubes for diluting samples. • Deionized or distilled water. • Absorbent paper for blotting the microtiter plate. • Container for Wash Solution

Target Details

Target:	Testosterone
Abstract:	Testosterone Products
Target Type:	Hormone

Application Details

Application Notes:	• Limited by the current condition and scientific technology, we cannot completely conduct the comprehensive identification and analysis on the raw material provided by suppliers. So there might be some qualitative and technical risks to use the kit. • The final experimental results will be closely related to validity of the products, operation skills of the end users and the experimental environments. Please make sure that sufficient samples are available. • Kits from different batches may be a little different in detection range, sensitivity and color developing time. • Do not mix or substitute reagents from one kit lot to another. Use only the reagents supplied by manufacturer. • Protect all reagents from strong light during storage and incubation. All the bottle caps of reagents should be covered tightly to prevent the evaporation and contamination of microorganism. • There may be some foggy substance in the wells when the plate is opened at the first time. It will not have any effect on the final assay results. Do not remove microtiter plate from the

	storage bag until needed. • Wrong operations during the reagents preparation and loading, as well as incorrect parameter setting for the plate reader may lead to incorrect results. A microplate plate reader with a bandwidth of 10nm or less and an optical density range of 0-3 O.D. or greater at 450 ± 10nm wavelength is acceptable for use in absorbance measurement. Please read the instruction carefully and adjust the instrument prior to the experiment. • Even the same operator might get different results in two separate experiments. In order to get better reproducible results, the operation of every step in the assay should be controlled. Furthermore, a preliminary experiment before assay for each batch is recommended. • Each kit has been strictly passed Q.C test. However, results from end users might be inconsistent with our in-house data due to some unexpected transportation conditions or different lab equipments. Intra-assay variance among kits from different batches might arise from above factors, too. • Kits from different manufacturers for the same item might produce different results, since we have not compared our products with other manufacturers.
Comment:	Information on standard material: The standard might be recombinant protein or natural protein, that will depend on the specific kit. Moreover, the expression system is E.coli or yeast or mammal cell. There is 0.05% proclin 300 in the standard as preservative. Information on reagents: The stop solution used in the kit is sulfuric acid with concentration of 1 mol/L. And the wash solution is TBS. The standard diluent contains 0.02 % sodium azide, assay diluent A and assay diluent B contain 0.01% sodium azide. Some kits can contain is BSA in them. Information on antibodies: The provided antibodies and their host vary in different kits.
Sample Volume:	50 µL
Assay Time:	2 h
Plate:	Pre-coated
Protocol:	The microplate provided in this kit has been pre-coated with a monoclonal antibody specific to Testosterone (Testo). A competitive inhibition reaction is launched between biotin labeled Testosterone (Testo) and unlabeled Testosterone (Testo) (Standards or samples) with the pre-coated antibody specific to Testosterone (Testo). After incubation the unbound conjugate is washed off. Next, avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. The amount of bound HRP conjugate is reverse proportional to

	the concentration of Testosterone (Testo) in the sample. Then the mixture of substrate A and B is added to generate glow light emission kinetics. Upon plate development, the intensity of the emitted light is reverse proportional to the Testosterone (Testo) level in the sample or standard.
Sample Preparation:	• We are only responsible for the kit itself, but not for the samples consumed during the assay. The user should calculate the possible amount of the samples used in the whole test. Please reserve sufficient samples in advance. • Please predict the concentration before assaying. If values for these are not within the range of the standard curve, users must determine the optimal sample dilutions for their particular experiments. Sample should be diluted by 0.01mol/L PBS(PH=7.0-7.2). • If the samples are not indicated in the manual, a preliminary experiment to determine the validity of the kit is necessary. • Tissue or cell extraction samples prepared by chemical lysis buffer may cause unexpected ELISA results due to the impacts from certain chemicals. • Due to the possibility of mismatching between antigen from other origin and antibody used in our kits (e.g.antibody targets conformational epitope rather than linear epitope), some native or recombinant proteins from other manufacturers may not be recognized by our products. • Influenced by the factors including cell viability, cell number or sampling time, samples from cell culture supernatant may not be detected by the kit. • Fresh samples without long time storage is recommended for the test. Otherwise, protein degradation and denaturalization may occur in those samples and finally lead to wrong results.
Assay Procedure:	• 1. Determine wells for diluted standard, blank and sample. Prepare 5 wells for standard points, 1 well for blank. Add 50 µL each of dilutions of standard (read Reagent Preparation), blank and samples into the appropriate wells, respectively. And then add 50 µL of Detection Reagent A to each well immediately. Shake the plate gently (using a microplate shaker is recommended). Cover with a Plate sealer. Incubate for 1 hour at 37 °C. Detection Reagent A may appear cloudy. Warm to room temperature and mix gently until solution appears uniform. • 2. Aspirate the solution and wash with 350 µL of 1X Wash Solution to each well using a squirt bottle, multi-channel pipette, manifold dispenser or autowasher, and let it sit for 1-2 minutes. Remove the remaining liquid from all wells completely by snapping the plate onto absorbent paper. Repeat 3 times. After the last wash, remove any remaining Wash Buffer by aspirating or decanting. Invert the plate and blot it against absorbent paper. • 3. Add 100 µL of Detection Reagent B working solution to each well. Incubate for 30 minutes at 37 °C after covering it with the Plate sealer. • 4. Repeat the aspiration/wash process for total 5 times as conducted in step 2. • 5. Add 100 µL of Substrate working Solution to each well. Cover with a new Plate sealer. Incubate for 5-10 minutes at 37 °C (Don't exceed 10 minutes). Protect from light. • 6. Measure the chemiluminescence signal in a microplate luminometer or as appropriate for the instrument used. Note:

Application Details

- 1. Assay preparation: Keep appropriate numbers of wells for 1 experiment and remove extra wells from microplate. Rest wells should be resealed and stored at -20 °C.
- 2. Samples or reagents addition: Please use the freshly prepared Standard. Please carefully add samples to wells and mix gently to avoid foaming. Do not touch the well wall. For each step in the procedure, total dispensing time for addition of reagents or samples to the assay plate should not exceed 10 minutes. This will ensure equal elapsed time for each pipetting step, without interruption. To avoid cross-contamination, change pipette tips between additions of standards, samples, and reagents. Also, use separated reservoirs for each reagent.
- 3. Incubation: To ensure accurate results, proper adhesion of plate sealers during incubation steps is necessary. Do not allow wells to sit uncovered for extended periods between incubation steps. Once reagents are added to the well strips, DO NOT let the strips DRY at any time during the assay. Incubation time and temperature must be controlled.
- 4. Washing: The wash procedure is critical. Complete removal of liquid at each step is essential for good performance. After the last wash, remove any remaining Wash Solution by aspirating or decanting and remove any drop of water and fingerprint on the bottom of the plate. Insufficient washing will result in poor precision and false elevated absorbance reading.
- 5. For Substrate A and B, please protect it from light.
- 6. Relative light units (RLUs) may differ from different luminometers.The Immunoassay was optimized using a Beijing Hamamatsu luminometer. Other instruments may require settings to be adjusted.
- 7. Relative light units may vary within the 10 minute reading window.

Assay Precision:	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level Testosterone (Testo) were tested 20 times on one plate, respectively. Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level Testosterone (Testo) were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100 Intra-Assay: CV<10% Inter-Assay: CV<12%
Restrictions:	For Research Use only

Handling

Precaution of Use:	The Stop Solution suggested for use with this kit is an acid solution. Wear eye, hand, face, and clothing protection when using this material.
Handling Advice:	The stability of kit is determined by the loss rate of activity. The loss rate of this kit is less than 5 % within the expiration date under appropriate storage condition. To minimize extra influence on the performance, operation procedures and lab conditions,

Handling

	especially room temperature, air humidity, incubator temperature should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same operator from the beginning to the end.
Storage:	4 °C/-20 °C
Storage Comment:	• For unopened kit: All the reagents should be kept according to the labels on vials. The Standard, Detection Reagent A, Detection Reagent B and the 96-well strip plate should be stored at -20°C upon receipt while the others should be at 4°C. • For opened kit: When the kit is opened, the remaining reagents still need to be stored according to the above storage condition. Besides, please return the unused wells to the foil pouch containing the desiccant pack, and reseal along entire edge of zip-seal. Note: It is highly recommended to use the remaining reagents within 1 month provided this is within the expiration date of the kit. • For ELISA kit, 1 day storage at 37°C can be considered as 2 months at 4°C, which means 3 days at 37°C equaling 6 months at 4°C.
Expiry Date:	6 months

Publications

Product cited in:	Chen, Li, Ding, Xu, Guo, Zhou: "Growth differential factor-9 inhibits testosterone production in mouse theca interstitial cells." in: **Fertility and sterility**, Vol. 100, Issue 5, pp. 1444-50, (2013) (PubMed).

Images

ELISA

Image 1.