Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Human 8-OHdG ELISA Kit

Catalog No: tcbe1995

Available Sizes

Size: 96Tests

Specifications

Species Reactivity:
Human

Conjugation:
HRP

Sample Type:
Cell culture supernatant, Urine, Serum, Plasma 100 ul Volume

Detection Range:
Standard Curve Range: 5-100 ng/mL

Assay Time:
90 minutes

Detection Method:
Colorimetric;Competitive ELISA

Component:
Microtiter Plate
Enzyme Conjugate
Standards
Substrate A
Substrate B
Stop Solution
Wash Solution
Balance Solution

Storage Instruction:
Store at 4°C

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Notes

This Human 8-OHdG ELISA kit is intended for laboratory research use only and not for use in diagnostic or therapeutic procedures. The stop solution changes color from blue to yellow and the intensity of the color is measured at 450 nm using a spectrophotometer. In order to measure the concentration of Human 8-OHdG in the sample, this Human 8-OHdG ELISA Kit includes a set of calibration standards. The calibration standards are assayed at the same time as the samples and allow the operator to produce a standard curve of optical density versus Human 8-OHdG concentration. The concentration of the samples is then determined by comparing the O.D. of the samples to the standard curve. NOTE: 1. This kit contains materials with small quantities of sodium azide. Sodium azide reacts with lead and copper plumbing to form explosive metal azides. Upon disposal, flush drains with a large volume of water to prevent azide accumulation. Avoid ingestion and contact with eyes, skin or mucous membranes. In the case of contact, rinse the affected area with plenty of water. Observe all federal, state and local regulations for disposal. 2. All blood components and biological materials should be handled as potentially hazardous. Follow universal precautions as established by the Centers for Disease Control and Prevention and by the Occupational Safety and Health Administration when handling and disposing of infectious agents.

Product Description

As an analytic biochemistry assay, ELISA involves detection of an 'analyte' (i.e. the specific substance whose presence is being quantitatively or qualitatively analyzed) in a liquid sample by a method that continues to use liquid reagents during the 'analysis' (i.e. controlled sequence of biochemical reactions that will generate a signal which can be easily quantified and interpreted as a measure of the amount of analyte in the sample) that stays liquid and remains inside a reaction chamber or well needed to keep the reactants contained.

As a heterogenous assay, ELISA separates some component of the analytical reaction mixture by adsorbing certain components onto a solid phase which is physically immobilized. In ELISA, a liquid sample is added onto a stationary solid phase with special binding properties and is followed by multiple liquid reagents that are sequentially added, incubated and washed followed by some optical change (e.g. color development by the product of an enzymatic reaction) in the final liquid in the well from which the quantity of the analyte is measured. The qualitative 'reading' usually based on detection of intensity of transmitted light by spectrophotometry, which involves quantitation of transmission of some specific wavelength of light through the liquid (as well as the transparent bottom of the well in the multiple-well plate format). The sensitivity of detection depends on amplification of the signal during the analytic reactions. Since enzyme reactions are very well known amplification processes, the signal is generated by enzymes which are linked to the detection reagents in fixed proportions to allow accurate quantification - thus the name 'enzyme linked'.

The analyte is also called the ligand because it will specifically bind or ligate to a detection reagent, thus ELISA falls under the bigger category of ligand binding assays. The ligand-specific binding reagent is 'immobilized', i.e., usually coated and dried onto the transparent bottom and sometimes also side wall of a well (the stationary 'solid phase 'solid substrate' here as opposed to solid microparticle/beads that can be washed away), which is usually constructed as a multiple-well plate known as the 'ELISA plate'. Conventionally, like other forms of immunoassays, the specificity of antigen-antibody type reaction is used because it is easy to raise an antibody specifically against an antigen in bulk as a reagent. Alternatively, if the analyte itself is an antibody, its target antigen can be used as the binding reagent.

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