



Human CYP21A2 ELISA kit (31.25-2000 pg/mL)

Cat. No.:	OB0625WXX-563
Assay Type:	Quantitative sandwich ELISA
Target Species:	Human
Assay Target:	CYP21A2
Size:	24T; 48T; 96T

This product is for research use only and is not intended for diagnostic use.

Product Overview

Description

Human CYP21A2 ELISA kit (31.25-2000 pg/mL) is an ELISA-based *in vitro* research tool designed specifically for the quantitative detection of CYP21A2 in human with a range of 31.25-2000 pg/mL and a specificity of 18.75 pg/mL.

Assay Principle

The micro ELISA plates in this kit are pre-coated with an antibody specific for CYP21A2. Standards or samples are added to the appropriate micro ELISA plate wells and bound to the specific antibody. A biotinylated detection antibody specific for CYP21A2 and avidin-horseradish peroxidase (HRP) conjugate are then added sequentially to each microplate well and incubated. The free components are washed away. Substrate solution is added to each well. Only wells containing CYP21A2, biotinylated detection antibody, and avidin-HRP conjugate will appear blue. Upon addition of sulfuric acid solution, the enzyme-substrate reaction terminates, and the color changes to yellow. Optical density (OD) is measured spectrophotometrically at 450 nm \pm 2 nm. The OD value is proportional to the concentration of CYP21A2. The concentration of CYP21A2 in the sample can be calculated by comparing the OD value of the sample with the standard curve.

Background

CYP21A2 belongs to the Cytochrome P450 family and is essential for the adrenal synthesis of mineralocorticoids and glucocorticoids. Deficiency of this enzyme is associated with certain diseases.

Synonyms

Cytochrome P450 family 21 subfamily A polypeptide 2; Steroid 21-hydroxylase; 21-OHase; EC 1.14.14.16



EC NO.	1.14.14.16
Formula Weight	52,597 Da
Applications	Human CYP21A2 ELISA kit (31.25-2000 pg/mL) is used to quantify CYP21A2 in serum, plasma, and biological fluid samples of humans, providing data to support a wide range of studies.
Research Area	Enzyme and Kinase; Metabolic pathway; Endocrinology; Hormone metabolism; Obesity research

Specification

Sample Type	Serum; Plasma; Biological fluids
Detection Range	31.25-2000 pg/mL
Sensitivity	18.75 pg/mL
Cross-reactivity	No significant cross-reactivity or interference was observed.
Storage	Store at 4°C.