Best Tools for immunology Research

CYP21A2 Polyclonal Antibody

Catalog No :	YT1197
Reactivity :	Human;Rat;Mouse;
Applications :	WB;ELISA
Target :	CYP21A2
Fields :	>>Steroid hormone biosynthesis;>>Metabolic pathways;>>Aldosterone synthesis and secretion;>>Cortisol synthesis and secretion;>>Cushing syndrome
Gene Name :	CYP21A2
Protein Name :	Steroid 21-hydroxylase
Human Gene Id :	1589
Human Swiss Prot No :	P08686
Mouse Swiss Prot No :	P03940
Immunogen :	Synthesized peptide derived from the Internal region of human CYP21A2.
Specificity :	CYP21A2 Polyclonal Antibody detects endogenous levels of CYP21A2 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. ELISA: 1:40000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 55kD

Cell Pathway : Steroid hormone biosynthesis;

Background : cytochrome P450 family 21 subfamily A member 2(CYP21A2) Homo sapiens This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and hydroxylates steroids at the 21 position. Its activity is required for the synthesis of steroid hormones including cortisol and aldosterone. Mutations in this gene cause congenital adrenal hyperplasia. A related pseudogene is located near this gene; gene conversion events involving the functional gene and the pseudogene are thought to account for many cases of steroid 21-hydroxylase deficiency. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],

Function : catalytic activity:A steroid + AH(2) + O(2) = a 21-hydroxysteroid + A + H(2)O.,cofactor:Heme group.,disease:Defects in CYP21A2 are the cause of adrenal hyperplasia type 3 (AH3) [MIM:201910]. AH3 is a form of congenital adrenal hyperplasia, a common recessive disease due to defective synthesis of cortisol. Congenital adrenal hyperplasia is characterized by androgen excess leading to ambiguous genitalia in affected females, rapid somatic growth during childhood in both sexes with premature closure of the epiphyses and short adult stature. Four clinical types: 'salt wasting' (SW, the most severe type), 'simple virilizing' (SV, less severely affected patients), with normal aldosterone biosynthesis, 'non-classic form' or late onset (NC or LOAH), and 'cryptic' (asymptomatic).,domain:The leucine-rich hydrophobic amino acid N-terminal region probably helps to anchor the protein to the microsomal

Subcellular Location : Endoplasmic reticulum membrane; Peripheral membrane protein . Microsome membrane ; Peripheral membrane protein .

Expression : Adrenal gland,PCR rescued clones,Peripheral blood,

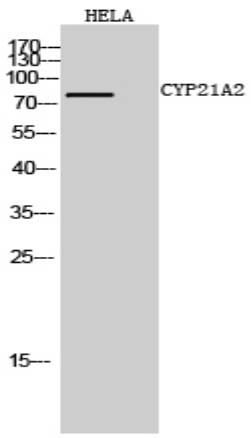
Sort : 4776

No4 : 1

Host : Rabbit

Modifications : Unmodified

Products Images



Western Blot analysis of HELA cells using CYP21A2 Polyclonal Antibody diluted at 1:1000