



CYP21A2 Polyclonal Antibody

Catalog No	YP-Ab-02567
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;IHC;IF;ELISA
Gene Name	CYP21A2
Immunogen	The antiserum was produced against synthesized peptide derived from human Cytochrome P450 21A2. AA range:151-200
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
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	1G2G6;CA21H;CAH1;CPS1;CYP21;CYP21A2;Steroid 21-hydroxylase;CYP21B; 21-OHase;Cytochrome P-450c21;Cytochrome P450 21;Cytochrome P450 XXI; Cytochrome P450-C21;Cytochrome P450-C21B
Observed Band	55kD
Calculated Molecular Weight	55kD
Cell Pathway	Endoplasmic reticulum membrane; Peripheral membrane protein . Microsome membrane ; Peripheral membrane protein .
Tissue Specificity	Adrenal gland,PCR rescued clones,Peripheral blood,
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

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],

matters needing attention

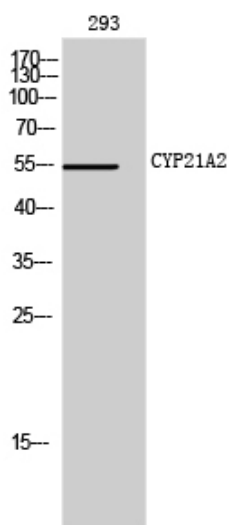
Avoid repeated freezing and thawing!

Usage suggestions

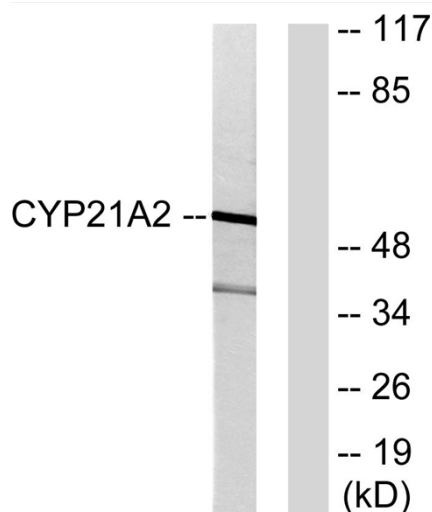
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



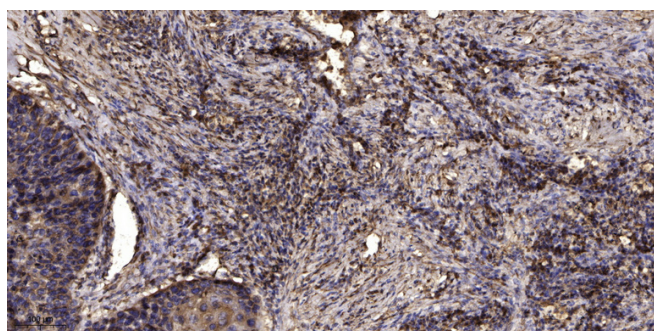
Products Images



Western Blot analysis of 293 cells using CYP21A2 Polyclonal Antibody diluted at 1:1000



Western blot analysis of lysates from 293 cells, using Cytochrome P450 21A2 Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded human Squamous cell carcinoma of lung. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).