Catalog #: APRab09625



Summary

| Production Name | CYP11B1/2 Rabbit Polyclonal Antibody |
|-----------------|--------------------------------------|
| Description | Rabbit Polyclonal Antibody |
| Host | Rabbit |
| Application | WB,ELISA |
| Reactivity | Human |

Performance

| Conjugation | Unconjugated |
|--------------|--|
| Modification | Unmodified |
| lsotype | lgG |
| Clonality | Polyclonal |
| Form | Liquid |
| Storage | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles. |
| Buffer | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N. |
| Purification | Affinity purification |

Immunogen

| Gene Name | CYP11B1/CYP11B2 |
|-------------------|---|
| Alternative Names | CYP11B1; S11BH; Cytochrome P450 11B1; mitochondrial; CYPXIB1; Cytochrome P- |
| | 450c11; Cytochrome P450C11; Steroid 11-beta-hydroxylase; CYP11B2; Cytochrome |
| | P450 11B2, mitochondrial; Aldosterone synthase; ALDOS; Aldosterone-synthesizing |
| | enzyme; |
| Gene ID | 1584/1585 |
| SwissProt ID | P15538/P19099. Synthesized peptide derived from the C-terminal region of human |
| | CYP11B1/2. |

Application

| Dilution Ratio | WB 1:500-1:2000, ELISA 1:40000.Not yet tested in other applications. |
|------------------|--|
| Molecular Weight | 57kDa |



Background

cytochrome P450 family 11 subfamily B member 1(CYP11B1) 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 mitochondrial inner membrane and is involved in the conversion of progesterone to cortisol in the adrenal cortex. Mutations in this gene cause congenital adrenal hyperplasia due to 11-beta-hydroxylase deficiency. Transcript variants encoding different isoforms have been noted for this gene. [provided by RefSeq, Jul 2008], catalytic activity: A steroid + reduced adrenal ferredoxin + O(2) = an 11-beta-hydroxysteroid + oxidized adrenal ferredoxin + H(2)O.,cofactor:Heme group.,disease:An anti-Lepore-type fusion of the CYP11B1 and CYP11B2 genes is a cause of glucocorticoid-remediable aldosteronism (GRA) [MIM:103900]., disease: Defects in CYP11B1 are the cause of adrenal hyperplasia type 4 (AH4) [MIM:202010]. AH4 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). AH4 patients usually have hypertension.,function:Has steroid 11-beta-hydroxylase activity. In addition to this activity, the 18 or 19-hydroxylation of steroids and the aromatization of androstendione to estrone have also been ascribed to cytochrome P450 XIB., similarity: Belongs to the cytochrome P450 family.,

Research Area

Steroid hormone biosynthesis;Androgen and estrogen metabolism;

Image Data



Western Blot analysis of various cells using CYP11B1/2 Polyclonal Antibody



Note

For research use only.