Product Name: CYP11A1 Rabbit Polyclonal Antibody
Catalog #: APRab09624

Summary

Production Name	CYP11A1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
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	CYP11A1
Alternative Names	CYP11A1; CYP11A; Cholesterol side-chain cleavage enzyme; mitochondrial; CYPXIA1; Cholesterol desmolase; Cytochrome P450 11A1; Cytochrome P450(scc)
Gene ID	1583.0
SwissProt ID	P05108.The antiserum was produced against synthesized peptide derived from human Cytochrome P450 11A1. AA range:412-461

Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:5000.
Molecular Weight	60kD

Product Name: CYP11A1 Rabbit Polyclonal Antibody
Catalog #: APRab09624

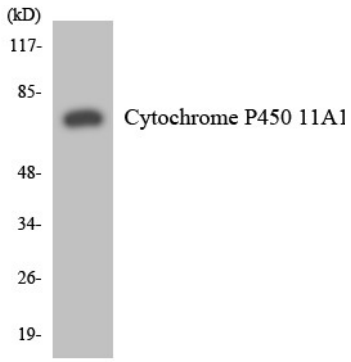
Background

cytochrome P450 family 11 subfamily A member 1(CYP11A1) 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 catalyzes the conversion of cholesterol to pregnenolone, the first and rate-limiting step in the synthesis of the steroid hormones. Two transcript variants encoding different isoforms have been found for this gene. The cellular location of the smaller isoform is unclear since it lacks the mitochondrial-targeting transit peptide. [provided by RefSeq, Jul 2008],catalytic activity:Cholesterol + reduced adrenal ferredoxin + O(2) = pregnenolone + 4-methylpentanal + oxidized adrenal ferredoxin + H(2)O.,cofactor:Heme group.,disease:Defects in CYP11A1 are a cause of congenital adrenal insufficiency (CAI).,disease:Defects in CYP11A1 are a cause of congenital lipoid adrenal hyperplasia (CLAH) [MIM:201710]; also called lipoid CAH. CLAH is the most severe form of adrenal hyperplasia. This autosomal recessive and potentially lethal condition includes the onset of profound adrenocortical insufficiency shortly after birth, hyperpigmentation reflecting increased production of pro-opiomelanocortin, elevated plasma renin activity as a consequence of reduced aldosterone synthesis, and male pseudohermaphroditism resulting from deficient fetal testicular testosterone synthesis. CLAH is a rare disease, except in Japan and Korea where it accounts for a significant percentage of cases of congenital adrenal hyperplasia.,function:Catalyzes the side-chain cleavage reaction of cholesterol to pregnenolone.,induction:By 8-bromo cyclic AMP.,pathway:Lipid metabolism; C21-steroid hormone metabolism.,similarity:Belongs to the cytochrome P450 family.,

Research Area

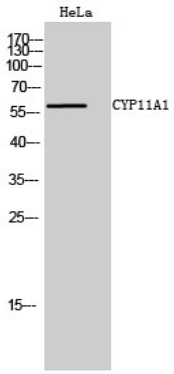
Steroid hormone biosynthesis;

Image Data



Western blot analysis of the lysates from HeLa cells using Cytochrome P450 11A1 antibody.

Product Name: CYP11A1 Rabbit Polyclonal Antibody
Catalog #: APRab09624



Western Blot analysis of HeLa cells using CYP11A1 Polyclonal Antibody

Note

For research use only.