Best Tools for immunology Research

CYP11A1 Polyclonal Antibody

Catalog No :	YT1187
Reactivity :	Human
Applications :	WB;ELISA
Target :	CYP11A1
Fields :	>>Steroid hormone biosynthesis;>>Metabolic pathways;>>Ovarian steroidogenesis;>>Aldosterone synthesis and secretion;>>Cortisol synthesis and secretion;>>Cushing syndrome
Gene Name :	CYP11A1
Protein Name :	Cholesterol side-chain cleavage enzyme mitochondrial
Human Gene Id :	1583
Human Swiss Prot No :	P05108
Mouse Swiss Prot No :	Q9QZ82
Immunogen :	The antiserum was produced against synthesized peptide derived from human Cytochrome P450 11A1. AA range:412-461
Specificity :	CYP11A1 Polyclonal Antibody detects endogenous levels of CYP11A1 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: 1:5000. 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 : 60kD

Cell Pathway : Steroid hormone biosynthesis;

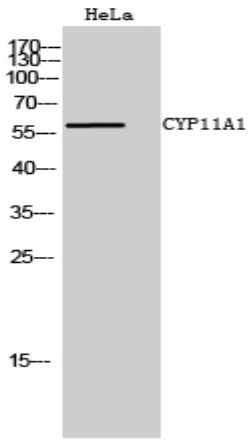
Background : cytochrome P450 family 11 subfamily A member 1(CYP11A1) Homo sapiens This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids 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],

Function : 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

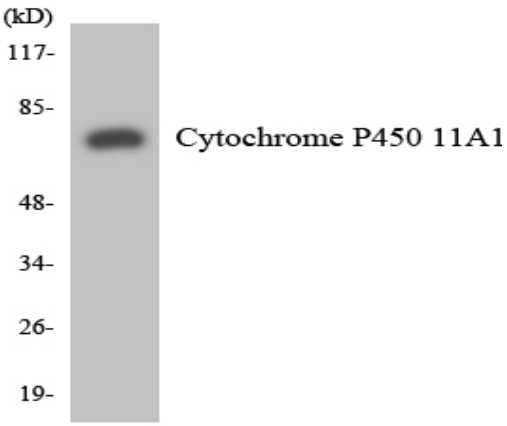
Subcellular Location : Mitochondrion inner membrane ; Peripheral membrane protein . Localizes to the matrix side of the mitochondrion inner membrane. .

Expression : Brain,Choriocarcinoma,Placenta,

Products Images



Western Blot analysis of HeLa cells using CYP11A1 Polyclonal Antibody



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