



CYP11A1 Monoclonal Antibody

Catalog No	YP-mAb-02559
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	CYP11A1
Immunogen	The antiserum was produced against synthesized peptide derived from human Cytochrome P450 11A1. AA range:412-461
Specificity	CYP11A1 Monoclonal Antibody detects endogenous levels of CYP11A1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Cholesterol desmolase;Cholesterol side-chain cleavage enzyme;mitochondrial; CYP11A;CYPXIA1;Cytochrome P450 11A1;CYP11A1;Cholesterol side-chain cleavage enzyme mitochondrial;Cytochrome P450(scc)
Observed Band	60kD
Calculated Molecular Weight	60kD
Cell Pathway	Mitochondrion inner membrane ; Peripheral membrane protein . Localizes to the matrix side of the mitochondrion inner membrane. .
Tissue Specificity	Brain,Choriocarcinoma,Placenta,
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

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],

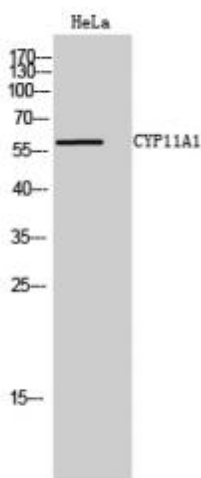
matters needing attention

Avoid repeated freezing and thawing!

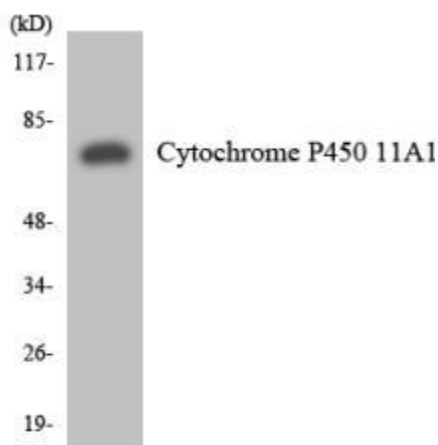
Usage suggestions

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

Products Images



Western Blot analysis of HeLa cells using CYP11A1 Monoclonal Antibody



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