



CYP11A1 (PT1913R) Mouse mAb

Catalog No	YP-mAb-19358
Isotype	IgG,Kappa
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	CYP11A1
Protein Name	Cholesterol side-chain cleavage enzyme mitochondrial
Immunogen	
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Purification	Recombinant Antibody expressed in animal component-free (ACF) media, purified via Protein A affinity chromatography.
Dilution	WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CYP11A1 ; CYP11A ; Cholesterol side-chain cleavage enzyme ; mitochondrial ; CYPXIA1 ; Cholesterol desmolase ; Cytochrome P450 11A1 ; Cytochrome P450 ; scc ;
Observed Band	55kD
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 lipid adrenal hyperplasia (CLAH) [MIM:201710]; also called lipid 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.

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],

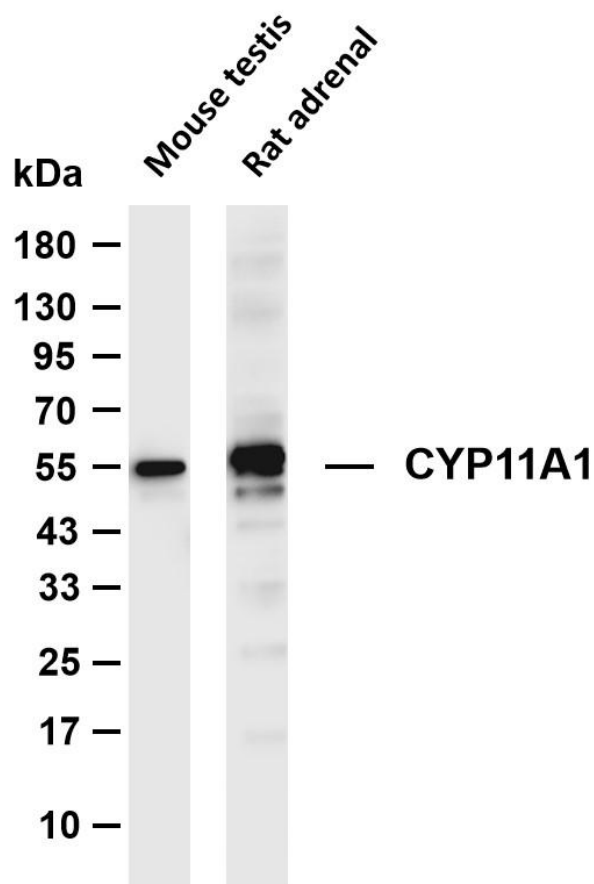
matters needing attention

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



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-CYP11A1 (PT1913R) antibody. The HRP-conjugated Goat anti-Mouse IgG (H + L) antibody was used to detect the antibody. Lane 1: Mouse testis Lane 2: Rat adrenal Predicted band size: 60kDa Observed band size: 55kDa