

## Cytochrome P450 17A1 mouse mAb

Catalog No: YM1339

Reactivity: Human

**Applications:** WB

Target: CYP17A1

**Fields:** >>Steroid hormone biosynthesis;>>Metabolic pathways;>>Ovarian

steroidogenesis;>>Prolactin signaling pathway;>>Cortisol synthesis and

secretion;>>Cushing syndrome

Gene Name: cyp17a1

Human Gene ld: 1586

**Human Swiss Prot** 

No:

**Mouse Swiss Prot** 

No:

**Immunogen:** Purified recombinant human Cytochrome P450 17A1 protein fragments

expressed in E.coli.

P05093

P27786

**Specificity:** This antibody detects endogenous levels of Cytochrome P450 17A1 and does

not cross-react with related proteins.

**Formulation:** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Source:** Monoclonal, Mouse

**Dilution:** wb 1:1000

**Purification:** The antibody was affinity-purified from mouse ascites 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 17 subfamily A member 1(CYP17A1) 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 endoplasmic reticulum. It has both 17alpha-hydroxylase and 17,20-lyase activities and is a key enzyme in the steroidogenic pathway that produces progestins, mineralocorticoids,

glucocorticoids, androgens, and estrogens. Mutations in this gene are associated

with isolated steroid-17 alpha-hydroxylase deficiency, 17-alpha-

hydroxylase/17,20-lyase deficiency, pseudohermaphroditism, and adrenal

hyperplasia. [provided by RefSeq, Jul 2008],

**Function :** catalytic activity: A steroid + AH(2) + O(2) = a 17-alpha-hydroxysteroid + A + A

H(2)O.,cofactor:Heme group.,disease:Defects in CYP17A1 are the cause of adrenal hyperplasia type 5 (AH5) [MIM:202110]. AH5 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).,enzyme regulation:Regulated predominantly by intracellular

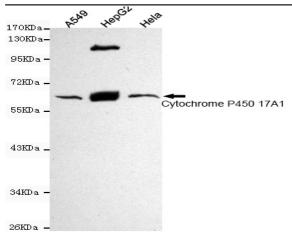
cAMP levels., function: Conversion of pregnenolone and p

Subcellular Location:

Endoplasmic reticulum membrane . Microsome membrane .

**Expression :** Brain, Corpus callosum,

## **Products Images**



Western blot detection of Cytochrome P450 17A1 in Hela,HepG2 and A549 cell lysates using Cytochrome P450 17A1 mouse mAb (1:1000 diluted).Predicted band size:60KDa.Observed band size:60KDa.