

# CYP17A1 Rabbit mAb[F00A]

Cat NO. :A14695

#### Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB,ICC/IF	H,M	P05093	55KDa	Rabbit	IgG	50ul 100ul,200ul

Applications detail:

Application

WB

1:1000-2000

ICC/IF

The optimal dilutions should be determined by the end user

Conjugate:

UnConjugate

Form:

Liquid

sensitivity:

Endogenous

Purification:

Protein A purification

Specificity:

Antibody is produced by immunizing animals with a synthetic peptide of human CYP17A1.

#### Storage buffer and conditions:

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at-20°C or -80°C.

 $\label{products} \textbf{Products are valid for one natural year of receipt.} \textbf{Avoid repeated freeze} \ \textit{I} \ \textbf{thaw cycles}.$ 

### Tissue specificity:

## Subcellular location:

 ${\bf Endoplasmic\ reticulum\ membrane.\ Microsome\ membrane.}$ 

#### Function:

A cytochrome P450 monooxygenase involved in corticoid and androgen biosynthesis (PubMed:9452426, PubMed:27339894, PubMed:22266943, PubMed:25301938). Catalyzes 17-alpha hydroxylation of C21 steroids, which is common for both pathways. A second oxidative step, required only for androgen synthesis, involves an acyl-carbon cleavage. The 17-alpha hydroxy intermediates, as part of adrenal glucocorticoids biosynthesis pathway, are precursors of cortisol (PubMed:9452426, PubMed:25301938) (Probable). Hydroxylates steroid hormones, pregnenolone and progesterone to form 17-alpha hydroxy metabolites, followed by the cleavage of the C17-C20 bond to form C19 steroids, dehydroepiandrosterone (DHEA) and androstenedione

Introduction: WB: Western Blot IP: Immunoprecipitation IHC: Immunohistochemistry ChIP: Chromatin Immunoprecipitation ICC/IF: Immunocytochemistry/
Immunofluorescence F: Flow Cytometry

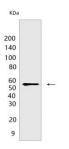
Cross Reactivity: H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus MI: mink C: chicken Dm D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Hr: horse



(PubMed:9452426, PubMed:27339894, PubMed:22266943, PubMed:25301938). Has 16-alpha hydroxylase activity. Catalyzes 16-alpha hydroxylation of 17-alpha hydroxy pregnenolone, followed by the cleavage of the C17-C20 bond to form 16-alpha-hydroxy DHEA. Also 16-alpha hydroxylates androgens, relevant for estriol synthesis (PubMed:27339894, PubMed:25301938). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (CPR,NADPH-ferrihemoprotein reductase) (PubMed:9452426, PubMed:27339894, PubMed:22366943, PubMed:25301938)..

## **Validation Data:**

### CYP17A1 Rabbit mAb[F00A] Images



Western blot (SDS PAGE) analysis of extracts from PC-3 cells.Using CYP17A1 Rabbit mAb IgG [F00A] at dilution of 1:1000 incubated at  $4\,^{\circ}\mathrm{C}$  over night.

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