

Cytochrome P450 17A1 Rabbit mAb
Catalog # AP75325**Specification****Cytochrome P450 17A1 Rabbit mAb - Product Information**

Application	WB, IHC-P, IHC-F, IP, ICC
Primary Accession	P05093
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	57371

Cytochrome P450 17A1 Rabbit mAb - Additional Information**Gene ID** 1586**Other Names**
CYP17A1**Dilution**
WB~~1/500-1/1000
IHC-P~~N/A
IHC-F~~N/A
IP~~N/A
ICC~~N/A**Format**
Liquid**Cytochrome P450 17A1 Rabbit mAb - Protein Information****Name** CYP17A1 {ECO:0000303|PubMed:19793597, ECO:0000312|HGNC:HGNC:2593}**Function**

A cytochrome P450 monooxygenase involved in corticoid and androgen biosynthesis (PubMed:22266943, PubMed:25301938, PubMed:27339894, PubMed:9452426). 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 (Probable) (PubMed:25301938, PubMed:9452426). 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 (PubMed:22266943, PubMed:22266943, PubMed:22266943).

[25301938](http://www.uniprot.org/citations/25301938), PubMed:<[27339894](http://www.uniprot.org/citations/27339894)>, PubMed:<[36640554](http://www.uniprot.org/citations/36640554)>, PubMed:<[9452426](http://www.uniprot.org/citations/9452426)>). 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 (PubMed:<[36640554](http://www.uniprot.org/citations/36640554)>). Also 16-alpha hydroxylates androgens, relevant for estriol synthesis (PubMed:<[25301938](http://www.uniprot.org/citations/25301938)>, PubMed:<[27339894](http://www.uniprot.org/citations/27339894)>). 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:<[22266943](http://www.uniprot.org/citations/22266943)>, PubMed:<[25301938](http://www.uniprot.org/citations/25301938)>, PubMed:<[27339894](http://www.uniprot.org/citations/27339894)>, PubMed:<[9452426](http://www.uniprot.org/citations/9452426)>).

Cellular Location

Endoplasmic reticulum membrane. Microsome membrane

Cytochrome P450 17A1 Rabbit mAb - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Cytochrome P450 17A1 Rabbit mAb - Images



