

**Anti-Cytochrome P450 17A1 Rabbit Monoclonal Antibody**  
Catalog # ABO15426

**Specification**

**Anti-Cytochrome P450 17A1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, IF, ICC, IP, FC
Primary Accession	<a href="#">P05093</a>
Host	Rabbit
Isotype	IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-Cytochrome P450 17A1 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

**Anti-Cytochrome P450 17A1 Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 1586

**Other Names**

Steroid 17-alpha-hydroxylase/17, 20 lyase, 1.14.14.19, 17-alpha-hydroxyprogesterone aldolase, 1.14.14.32, CYPXVII, Cytochrome P450 17A1, Cytochrome P450-C17, Cytochrome P450c17, Steroid 17-alpha-monooxygenase, CYP17A1 {ECO:0000303|PubMed:19793597, ECO:0000312|HGNC:HGNC:2593}

**Application Details**

WB 1:500-1:2000<br>ICC/IF 1:50-1:200<br>IP 1:50<br>FC 1:50

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human Cytochrome P450 17A1

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

**Anti-Cytochrome P450 17A1 Rabbit Monoclonal Antibody - 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:<a href="http://www.uniprot.org/citations/22266943" target="\_blank">22266943</a>, PubMed:<a href="http://www.uniprot.org/citations/25301938" target="\_blank">25301938</a>, PubMed:<a href="http://www.uniprot.org/citations/27339894" target="\_blank">27339894</a>, PubMed:<a href="http://www.uniprot.org/citations/9452426" target="\_blank">9452426</a>). 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:<a href="http://www.uniprot.org/citations/25301938" target="\_blank">25301938</a>, PubMed:<a href="http://www.uniprot.org/citations/9452426" target="\_blank">9452426</a>). 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:<a href="http://www.uniprot.org/citations/22266943" target="\_blank">22266943</a>, PubMed:<a href="http://www.uniprot.org/citations/25301938" target="\_blank">25301938</a>, PubMed:<a href="http://www.uniprot.org/citations/27339894" target="\_blank">27339894</a>, PubMed:<a href="http://www.uniprot.org/citations/36640554" target="\_blank">36640554</a>, PubMed:<a href="http://www.uniprot.org/citations/9452426" target="\_blank">9452426</a>). 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:<a href="http://www.uniprot.org/citations/36640554" target="\_blank">36640554</a>). Also 16-alpha hydroxylates androgens, relevant for estriol synthesis (PubMed:<a href="http://www.uniprot.org/citations/25301938" target="\_blank">25301938</a>, PubMed:<a href="http://www.uniprot.org/citations/27339894" target="\_blank">27339894</a>). 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:<a href="http://www.uniprot.org/citations/22266943" target="\_blank">22266943</a>, PubMed:<a href="http://www.uniprot.org/citations/25301938" target="\_blank">25301938</a>, PubMed:<a href="http://www.uniprot.org/citations/27339894" target="\_blank">27339894</a>, PubMed:<a href="http://www.uniprot.org/citations/9452426" target="\_blank">9452426</a>).

## Cellular Location

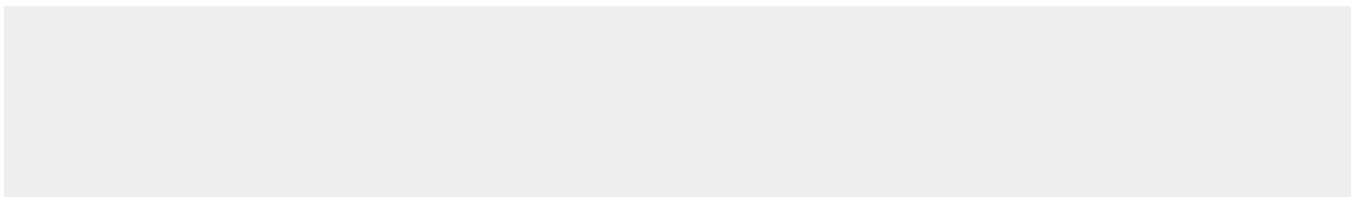
Endoplasmic reticulum membrane. Microsome membrane

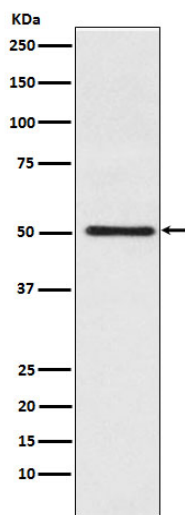
## Anti-Cytochrome P450 17A1 Rabbit Monoclonal Antibody - Protocols

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](#)

## Anti-Cytochrome P450 17A1 Rabbit Monoclonal Antibody - Images





Western blot analysis of Cytochrome P450 17A1 expression in Jurkat cell lysate.