

**Anti-Cytochrome P450 11B1/2 Antibody**  
Catalog # AP53988**Specification****Anti-Cytochrome P450 11B1/2 Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P15538</a>
Other Accession	<a href="#">P19099</a>
Reactivity	<b>Human, Mouse, Rat</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>57573</b>

**Anti-Cytochrome P450 11B1/2 Antibody - Additional Information****Gene ID** 1584**Other Names**

CYP11B1; S11BH; Cytochrome P450 11B1 mitochondrial; CYPXIB1; Cytochrome P-450c11; Cytochrome P450C11; Steroid 11-beta-hydroxylase; CYP11B2; Cytochrome P450 11B2 mitochondrial; Aldosterone synthase; ALDOS; Aldosterone-synthesizing enzyme; CYPXIB2; Cytochrome P-450Aldo; Cytochrome P-450C18; Steroid 18-hydroxylase

**Target/Specificity**

Recognizes endogenous levels of Cytochrome P450 11B1/2 protein.

**Dilution**

WB~~1/500 - 1/1000

**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**Anti-Cytochrome P450 11B1/2 Antibody - Protein Information****Name** CYP11B1 {ECO:0000303|PubMed:18215163, ECO:0000312|HGNC:HGNC:2591}**Function**

A cytochrome P450 monooxygenase involved in the biosynthesis of adrenal corticoids (PubMed:<a href="http://www.uniprot.org/citations/12530636" target="\_blank">12530636</a>, PubMed:<a href="http://www.uniprot.org/citations/1518866" target="\_blank">1518866</a>, PubMed:<a href="http://www.uniprot.org/citations/1775135" target="\_blank">1775135</a>, PubMed:<a href="http://www.uniprot.org/citations/18215163" target="\_blank">18215163</a>, PubMed:<a href="http://www.uniprot.org/citations/23322723" target="\_blank">23322723</a>). Catalyzes a variety of reactions that are essential for many species, including detoxification, defense, and the

formation of endogenous chemicals like steroid hormones. Steroid 11beta, 18- and 19-hydroxylase with preferred regioselectivity at 11beta, then 18, and lastly 19 (By similarity). Catalyzes the hydroxylation of 11-deoxycortisol and 11-deoxycorticosterone (21- hydroxyprogesterone) at 11beta position, yielding cortisol or corticosterone, respectively, but cannot produce aldosterone (PubMed:<a href="http://www.uniprot.org/citations/12530636" target="\_blank">12530636</a>, PubMed:<a href="http://www.uniprot.org/citations/1518866" target="\_blank">1518866</a>, PubMed:<a href="http://www.uniprot.org/citations/1775135" target="\_blank">1775135</a>, PubMed:<a href="http://www.uniprot.org/citations/18215163" target="\_blank">18215163</a>, PubMed:<a href="http://www.uniprot.org/citations/23322723" target="\_blank">23322723</a>). Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate for hydroxylation and reducing the second into a water molecule. Two electrons are provided by NADPH via a two- protein mitochondrial transfer system comprising flavoprotein FDXR (adrenodoxin/ferredoxin reductase) and nonheme iron-sulfur protein FDX1 or FDX2 (adrenodoxin/ferredoxin) (PubMed:<a href="http://www.uniprot.org/citations/18215163" target="\_blank">18215163</a>). Due to its lack of 18-oxidation activity, it is incapable of generating aldosterone (PubMed:<a href="http://www.uniprot.org/citations/23322723" target="\_blank">23322723</a>). Could also be involved in the androgen metabolic pathway (Probable).

#### Cellular Location

Mitochondrion inner membrane {ECO:0000250|UniProtKB:P14137}; Peripheral membrane protein {ECO:0000250|UniProtKB:P14137}

#### Tissue Location

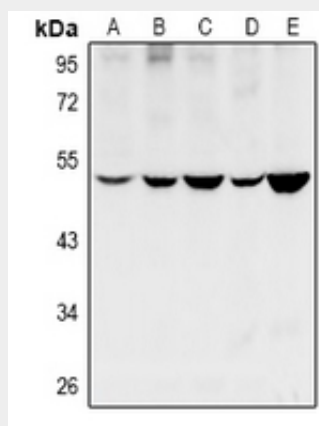
Expressed in the zona fasciculata/reticularis of the adrenal cortex.

### Anti-Cytochrome P450 11B1/2 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 11B1/2 Antibody - Images



Western blot analysis of Cytochrome P450 11B1/2 expression in HEK293T (A), LO2 (B), SGC7901 (C), PC12 (D), CT26 (E) whole cell lysates.

**Anti-Cytochrome P450 11B1/2 Antibody - Background**

Rabbit polyclonal antibody to Cytochrome P450 11B1/2