

**CYP11B1 Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP8723a****Specification****CYP11B1 Antibody (N-term) Blocking Peptide -  
Product Information**Primary Accession [P15538](#)**CYP11B1 Antibody (N-term) Blocking Peptide -  
Additional Information****Gene ID** 1584**Other Names**Cytochrome P450 11B1, mitochondrial,  
CYPXIB1, Cytochrome P-450c11,  
Cytochrome P450C11, Steroid  
11-beta-hydroxylase, CYP11B1, S11BH**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP8723a](/products/AP8723a) was selected from the N-term region of human CYP11B1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**CYP11B1 Antibody (N-term) Blocking Peptide -  
Protein Information****Name** CYP11B1**CYP11B1 Antibody (N-term) Blocking  
Peptide - Background**

CYP11B1 is 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 mitochondrial inner membrane and is involved in the conversion of progesterone to cortisol in the adrenal cortex.

**CYP11B1 Antibody (N-term) Blocking  
Peptide - References**

Helmberg,A., et.al., J. Clin. Endocrinol. Metab. 75 (5), 1278-1281 (1992) Nelson,D.R., et.al., Pharmacogenetics 14 (1), 1-18 (2004)

{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/18215163" target="\_blank">18215163</a>).

Catalyzes the hydroxylation of carbon hydrogen bond at 11-beta position of 11-deoxycortisol and 11-deoxycorticosterone/21-hydroxyprogesterone yielding cortisol or corticosterone, respectively (PubMed:<a href="http://www.uniprot.org/citations/18215163" target="\_blank">18215163</a>).

Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate 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>).

### Cellular Location

Mitochondrion inner membrane

{ECO:0000250|UniProtKB:P14137};

Peripheral membrane protein

{ECO:0000250|UniProtKB:P14137}

### CYP11B1 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)