

Datasheet for ABIN5518682  
**anti-CYP11A1 antibody (N-Term)**



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1 Image

1 Publication

## Overview

Quantity:	100 µg
Target:	CYP11A1
Binding Specificity:	AA 53-66, N-Term
Reactivity:	Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CYP11A1 antibody is un-conjugated
Application:	Western Blotting (WB)

## Product Details

Purpose:	Rabbit IgG polyclonal antibody for Cholesterol side-chain cleavage enzyme, mitochondrial(CYP11A1) detection. Tested with WB in Mouse,Rat.
Immunogen:	A synthetic peptide corresponding to a sequence at the N-terminus of mouse CYP11A1(53-66aa DNGWLNLYHFWRES), different from the related rat sequence by two amino acids.
Sequence:	DNGWLNLYHF WRES
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Cholesterol side-chain cleavage enzyme, mitochondrial(CYP11A1) detection. Tested with WB in Mouse,Rat. Gene Name: cytochrome P450, family 11, subfamily A, polypeptide 1 Protein Name: Cholesterol side-chain cleavage enzyme, mitochondrial

## Product Details

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Purification: Immunogen affinity purified.

## Target Details

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Target: CYP11A1

Alternative Name: CYP11A1 ([CYP11A1 Products](#))

Background: CYP11A1(Cytochrome p450, family 11, subfamily A, polypeptide 1), also called CYTOCHROME P450SCC, CYTOCHROME P450C11A1 or CYP11A, is a mitochondrial enzyme associated with the conversion of cholesterol to pregnenolone. CYP11A1 is a member of the cytochrome P450 superfamily of enzymes. The CYP11A1 gene is mapped on 15q24.1. Expression of the CYP11A1 gene may play a role in skin physiology and pathology and that cutaneous proopiomelanocortin activity may be autoregulated by a feedback mechanism involving glucocorticoids synthesized locally by Slominski et al. Using in vitro studies, CYP11A1 catalyzed the side-chain cleavage of 7-dehydrocholesterol to form 7-dehydropregnenolone. In addition, CYP11A1 catalyzed the metabolism of biologically inert vitamin D<sub>3</sub>, which is formed from 7-dehydrocholesterol, to form 2 hydroxylated products, 20-hydroxyvitamin D<sub>3</sub> and 20, 22-dihydroxyvitamin D<sub>3</sub>. Mutations in the CYP11A1 gene cause congenital adrenal insufficiency with partial or complete 46, XY sex reversal.

Synonyms: Cholesterol 20 22 desmolase antibody|Cholesterol desmolase antibody|Cholesterol monooxygenase(side chain cleaving) antibody|Cholesterol side chain cleavage enzyme antibody|Cholesterol side chain cleavage enzyme mitochondrial antibody|Cholesterol side-chain cleavage enzyme antibody|CP11A\_HUMAN antibody|CYP 11A antibody|CYP11A antibody|CYP11A1 antibody|CYPXIA1 antibody|Cytochrome P450 11A1 antibody|Cytochrome P450 11A1 mitochondrial antibody|Cytochrome P450 family 11 subfamily A polypeptide 1 antibody|Cytochrome P450 subfamily XIA(cholesterol side chain cleavage) antibody|Cytochrome P450 subfamily XIA antibody|Cytochrome P450(scc) antibody|Cytochrome P450C11A1 antibody|mitochondrial antibody|P450(scc) antibody|P450SCC antibody|Steroid 20 22 lyase antibody

Pathways: [Metabolism of Steroid Hormones and Vitamin D](#), [Steroid Hormone Biosynthesis](#), [C21-Steroid Hormone Metabolic Process](#), [Cellular Response to Molecule of Bacterial Origin](#)

## Application Details

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Application Notes: WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Mouse, Rat

Notes: Tested Species: Species with positive results. Predicted Species: Species predicted to be

## Application Details

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fit for the product based on sequence similarities.

Other applications have not been tested. Optimal dilutions should be determined by end users.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB.

Restrictions: For Research Use only

## Handling

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Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05 mg Thimerosal, 0.05 mg Sodium azide.

Preservative: Sodium azide, Thimerosal (Merthiolate)

Precaution of Use: This product contains Sodium azide and Thimerosal (Merthiolate): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.

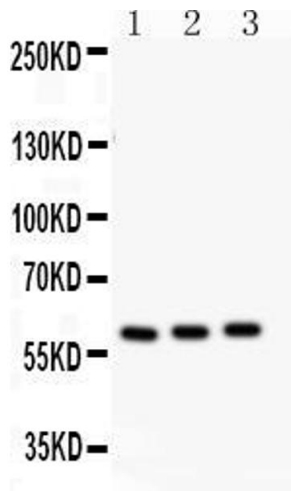
Storage: 4 °C, -20 °C

Storage Comment: At -20°C for one year. After reconstitution, at 4°C for one month.  
It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

## Publications

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Product cited in: He, Xu, Chen, Liu, Xi: "Abnormal apoptosis of trophoblastic cells is related to the up-regulation of CYP11A gene in placenta of preeclampsia patients." in: **PLoS ONE**, Vol. 8, Issue 3, pp. e59609, (2013) ([PubMed](#)).



### Western Blotting

**Image 1.** Anti-CYP11A1 antibody, Western blottingAll lanes: Anti CYP11A1 at 0.5ug/ml Lane 1: Rat Testis Tissue Lysate at 50ug Lane 2: Mouse Testis Tissue Lysate at 50ug Lane 3: Mouse Brain Tissue Lysate at 50ugPredicted bind size: 60KDObserved bind size: 60KD