

**DATASHEET**

**Cytochrome P450 11A1 Rabbit Polyclonal Antibody**

CAT. NO. APA06890

**KEY FEATURES**

Target	Cytochrome P450 11A1	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat, Monkey	Clonality	Polyclonal
Applications	WB, IHC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

**BACKGROUND**

A cytochrome P450 monooxygenase that catalyzes the side-chain hydroxylation and cleavage of cholesterol to pregnenolone, the precursor of most steroid hormones. Catalyzes three sequential oxidation reactions of cholesterol, namely the hydroxylation at C22 followed with the hydroxylation at C20 to yield 20R,22R-hydroxycholesterol that is further cleaved between C20 and C22 to yield the C21-steroid pregnenolone and 4-methylpentanal. 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).

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:50 - 1:100

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Rabbit polyclonal antibody to Cytochrome P450 11A1
Specificity	Recognizes endogenous levels of Cytochrome P450 11A1 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Cytochrome P450 11A1. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 60 kD; Observed: 60 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	CYP11A; Cholesterol side-chain cleavage enzyme mitochondrial; CYPXIA1; Cholesterol desmolase; Cytochrome P450 11A1; Cytochrome P450(scc)
Gene Symbol	CYP11A1
Entrez Gene	1583(Human); 13070(Mouse); 29680(Rat)
SwissProt	P05108(Human); Q9QZ82(Mouse); P14137(Rat)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

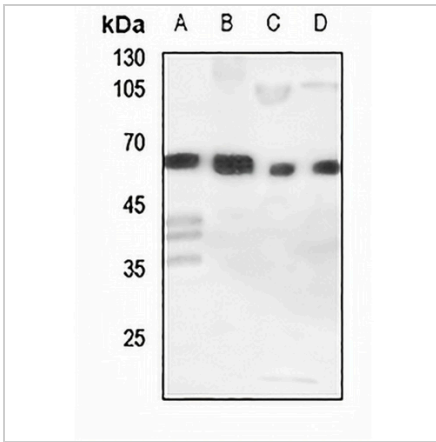
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET**

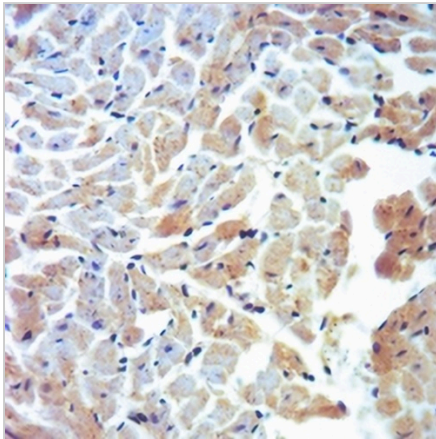
**Cytochrome P450 11A1 Rabbit Polyclonal Antibody**

CAT. NO. APA06890

**DATA**



Western blot analysis of Cytochrome P450 11A1 expression in HEK293T (A), HeLa (B), H460 (C), mouse lung (D) whole cell lysates. (Predicted band size: 60 kD; Observed band size: 60 kD)



Immunohistochemical analysis of Cytochrome P450 11A1 staining in rat heart formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.