DATASHEET

Cytochrome P450 11B1/2 Rabbit Polyclonal Antibody

CAT. NO. APA10836

KEY FEATURES

Target	Cytochrome P450 11B1/2	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IF/ICC	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 involved in the biosynthesis of adrenal corticoids . 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 . Catalyzes the hydroxylation of 11-deoxycortisol and 11-deoxycorticosterone (21-hydroxyprogesterone) at 11beta position, yielding cortisol or corticosterone, respectively, but cannot produce aldosterone . Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate for hydroxylation and reducing the second into a water molecule.

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
IF/ICC	1:50 - 1:200

*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 11B1/2
Specificity	Recognizes endogenous levels of Cytochrome P450 11B1/2 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Cytochrome P450 11B1/2. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 57 kD; Observed: 48 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	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
Gene Symbol	CYP11B1; CYP11B2
Entrez Gene	1584; 1585(Human)
SwissProt	P15538; P19099(Human)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact 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.

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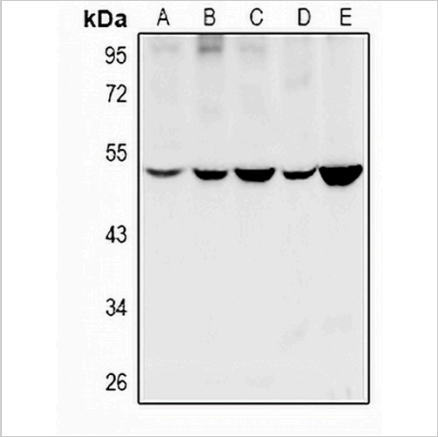
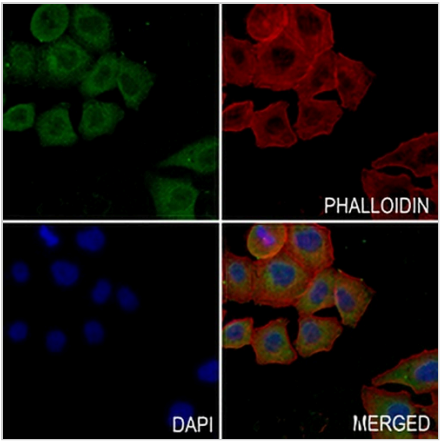
DATA



Western blot analysis of Cytochrome P450 11B1/2 expression in HEK293T (A), LO2 (B), SGC7901 (C), PC12 (D), CT26 (E) whole cell lysates. (Predicted band size: 57 kD; Observed band size: 48 kD)



Immunofluorescent analysis of Cytochrome P450 11B1/2 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 488 - conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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.