

DATASHEET

Cytochrome P450 4A11/22 Rabbit Polyclonal Antibody

CAT. NO. APA06888

KEY FEATURES

Target	Cytochrome P450 4A11/22	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IHC, 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 metabolism of fatty acids and their oxygenated derivatives (oxylipins) . Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (CPR; NADPH-ferrihemoprotein reductase) . Catalyzes predominantly the oxidation of the terminal carbon (omega-oxidation) of saturated and unsaturated fatty acids, the catalytic efficiency decreasing in the following order: dodecanoic > tetradecanoic > (9Z)-octadecenoic > (9Z,12Z)-octadecadienoic > hexadecanoic acid . Acts as a major omega-hydroxylase for dodecanoic (lauric) acid in liver .

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
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 4A11/22
Specificity	Recognizes endogenous levels of Cytochrome P450 4A11/22 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Cytochrome P450 4A11/22. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 59 kD; Observed: 59 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	CYP4A11; CYP4A2; Cytochrome P450 4A11; 20-hydroxyeicosatetraenoic acid synthase; 20-HETE synthase; CYP4AII; CYP4A11; Cytochrome P-450HK-omega; Cytochrome P450HL-omega; Fatty acid omega-hydroxylase; Lauric acid omega-hydroxylase; CYP4A22; Cytochrome P450 4A22; CYP4A22; Fatty acid omega-hydroxylase; Lauric acid omega-hydroxylase
Gene Symbol	CYP4A11; CYP4A22
Entrez Gene	1579; 284541(Human)
SwissProt	Q02928; Q5TCH4(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.

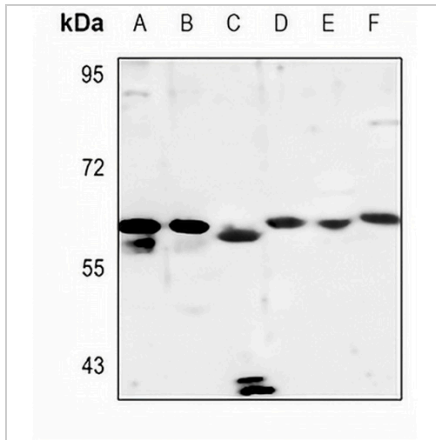
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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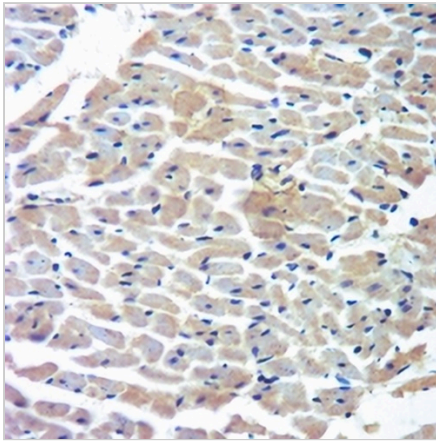
Cytochrome P450 4A11/22 Rabbit Polyclonal Antibody

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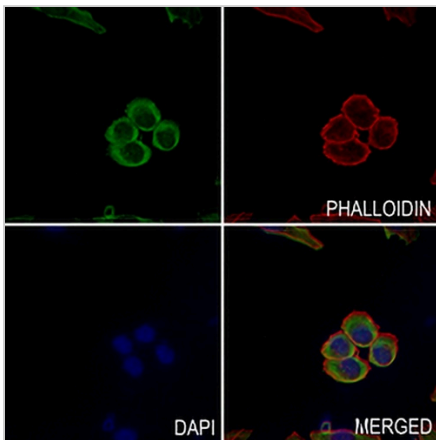
DATA



Western blot analysis of Cytochrome P450 4A11/22 expression in U2OS (A), DLD (B), mouse liver (C), mouse kidney (D), rat liver (E), rat kidney (F) whole cell lysates. (Predicted band size: 59 kD; Observed band size: 59 kD)



Immunohistochemical analysis of Cytochrome P450 4A11/22 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.



Immunofluorescent analysis of Cytochrome P450 4A11/22 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 humidified 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.