

DATASHEET

Cytochrome P450 51A1 Rabbit Polyclonal Antibody

CAT. NO. APA13406

KEY FEATURES

Target	Cytochrome P450 51A1	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

Sterol 14alpha-demethylase that plays a critical role in the cholesterol biosynthesis pathway, being cholesterol the major sterol component in mammalian membranes as well as a precursor for bile acid and steroid hormone synthesis . Cytochrome P450 monooxygenase that catalyzes the three-step oxidative removal of the 14alpha-methyl group (C-32) of sterols such as lanosterol (lanosta-8,24-dien-3beta-ol) and 24,25-dihydrolanosterol (DHL) in the form of formate, and converts the sterols to 4,4-dimethyl-5alpha-cholesta-8,14,24-trien-3beta-ol and 4,4-dimethyl-8,14-cholestadien-3beta-ol, respectively, which are intermediates of cholesterol biosynthesis .

APPLICATION

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

WB	1:500 - 1:2000
IHC	1:50 - 1:200
IF/ICC	1:20 - 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 51A1
Specificity	Recognizes endogenous levels of Cytochrome P450 51A1 protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human Cytochrome P450 51A1
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 46; Observed: 62 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	CYP51; Lanosterol 14-alpha demethylase; LDM; CYPLI; Cytochrome P450 51A1; Cytochrome P450-14DM; Cytochrome P45014DM; Cytochrome P450LI; Sterol 14-alpha demethylase
Gene Symbol	CYP51A1
Entrez Gene	1595(Human); 13121(Mouse); 25427(Rat)
SwissProt	Q16850(Human); Q8K0C4(Mouse); Q64654(Rat)

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

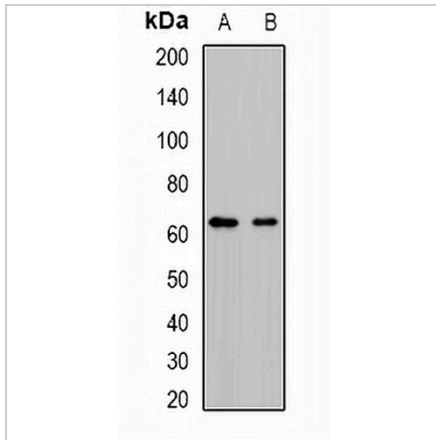
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

DATASHEET

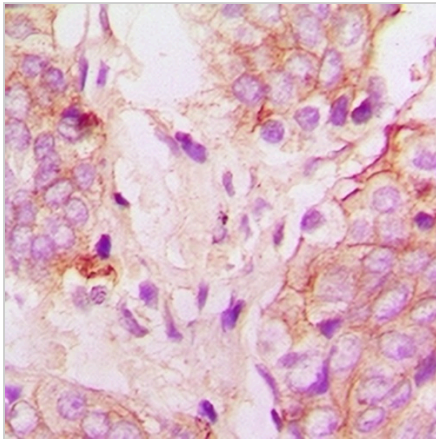
Cytochrome P450 51A1 Rabbit Polyclonal Antibody

CAT. NO. APA13406

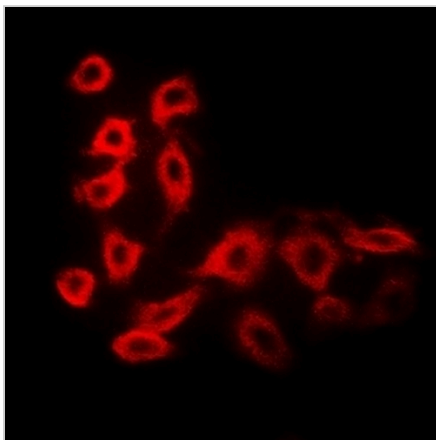
DATA



Western blot analysis of Cytochrome P450 51A1 expression in mouse kidney (A), rat liver (B) whole cell lysates. (Predicted band size: 46; 56 kD; Observed band size: 62 kD)



Immunohistochemical analysis of Cytochrome P450 51A1 staining in human prostate cancer 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 51A1 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 DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

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.