

DATASHEET

Cytochrome P450 1A1 Rabbit Polyclonal Antibody

CAT. NO. APA12663

KEY FEATURES

Target	Cytochrome P450 1A1	Source / Host	Rabbit
Reactivity	Human, Mouse	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 involved in the metabolism of various endogenous substrates, including fatty acids, steroid hormones and vitamins . 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 (NADPH--hemoprotein reductase) . Catalyzes the hydroxylation of carbon-hydrogen bonds. Exhibits high catalytic activity for the formation of hydroxysteroids from estrone (E1) and 17beta-estradiol (E2), namely 2-hydroxy E1 and E2, as well as D-ring hydroxylated E1 and E2 at the C15-alpha and C16-alpha positions . Displays different regioselectivities for polyunsaturated fatty acids (PUFA) hydroxylation .

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

*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 1A1
Specificity	Recognizes endogenous levels of Cytochrome P450 1A1 protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human Cytochrome P450 1A1
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 58 kD; Observed: 55 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	Cytochrome P450 1A1; CYP1A1; Cytochrome P450 form 6; Cytochrome P450-C; Cytochrome P450-P1
Gene Symbol	CYP1A1
Entrez Gene	1543(Human); 13076(Mouse)
SwissProt	P04798(Human); P00184(Mouse)

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

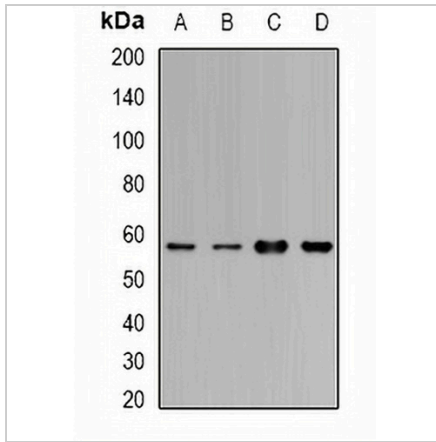
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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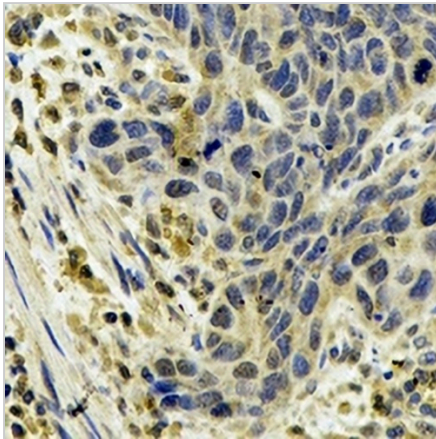
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Western blot analysis of Cytochrome P450 1A1 expression in MCF7 (A), BT474 (B), mouse lung (C), mouse liver (D) whole cell lysates. (Predicted band size: 58 kD; Observed band size: 55 kD)



Immunohistochemical analysis of Cytochrome P450 1A1 staining in human esophageal 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.

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.