

# Product datasheet

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# ARG57799 anti-CYP1B1 antibody

Package: 50 μg Store at: -20°C

# **Summary**

Product Description Rabbit Polyclonal antibody recognizes CYP1B1

Tested Reactivity Hu, Ms, Rat
Tested Application IHC-P, WB
Host Rabbit
Clonality Polyclonal

Isotype IgG

Target Name CYP1B1
Species Human

Immunogen Synthetic peptide around aa. 255-480 of Human CYP1B1.

Conjugation Un-conjugated

Alternate Names GLC3A; CP1B; EC 1.14.14.1; P4501B1; CYPIB1; Cytochrome P450 1B1

# **Application Instructions**

Application table	Application	Dilution
	IHC-P	0.5 - 1 μg/ml
	WB	0.1 - 0.5 μg/ml
Application Note	IHC-P: Antigen Retrieval: Boil tissue section in 10mM Citrate buffer (pH 6.0) for 20 min followed by cooling at RT.  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 61 kDa	

#### **Properties**

Form Liquid

Purification Affinity purification with immunogen.

Buffer PBS, 0.025% Sodium azide and 2.5% BSA.

Preservative 0.025% Sodium azide

Stabilizer 2.5% BSA

Concentration 0.5 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

#### Bioinformation

Gene Symbol

CYP1B1

Gene Full Name

cytochrome P450, family 1, subfamily B, polypeptide 1

Background

This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. The enzyme encoded by this gene localizes to the endoplasmic reticulum and metabolizes procarcinogens such as polycyclic aromatic hydrocarbons and 17beta-estradiol. Mutations in this gene have been associated with primary congenital glaucoma; therefore it is thought that the enzyme also metabolizes a signaling molecule involved in eye development, possibly a steroid. [provided by RefSeq, Jul 2008]

**Function** 

Cytochromes P450 are a group of heme-thiolate monooxygenases. In liver microsomes, this enzyme is involved in an NADPH-dependent electron transport pathway. It oxidizes a variety of structurally unrelated compounds, including steroids, fatty acids, retinoid and xenobiotics. Preferentially oxidizes 17beta-estradiol to the carcinogenic 4-hydroxy derivative, and a variety of procarcinogenic compounds to their activated forms, including polycyclic aromatic hydrocarbons. Promotes angiogenesis by removing cellular oxygenation products, thereby decreasing oxidative stress, release of antiangiogenic factor THBS2, then allowing endothelial cells migration, cell adhesion and capillary morphogenesis. These changes are concommitant with the endothelial nitric oxide synthase activity and nitric oxide synthesis. Plays an important role in the regulation of perivascular cell proliferation, migration, and survival through modulation of the intracellular oxidative state and NF-kappa-B expression and/or activity, during angiogenesis. Contributes to oxidative homeostasis and ultrastructural organization and function of trabecular meshwork tissue through modulation of POSTN expression. [UniProt]

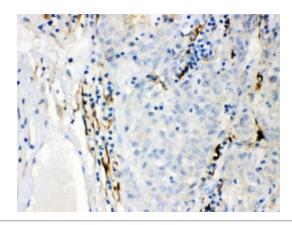
Calculated Mw

61 kDa

Cellular Localization

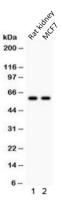
Endoplasmic reticulum membrane, peripheral membrane protein, microsome membrane, mitochondrion. [UniProt]

#### **Images**



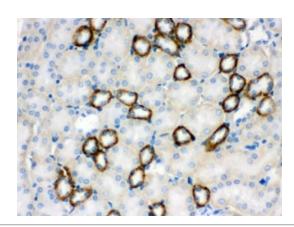
#### ARG57799 anti-CYP1B1 antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human liver cancer tissue stained with ARG57799 anti-CYP1B1 antibody. Antigen Retrieval: Boil tissue section in 10mM Citrate buffer (pH 6.0) for 20 min followed by cooling at RT.



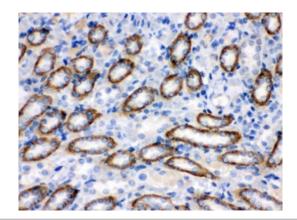
# ARG57799 anti-CYP1B1 antibody WB image

Western blot: 1) Rat kidney and 2) MCF7 cell lysates stained with ARG57799 anti-CYP1B1 antibody.



#### ARG57799 anti-CYP1B1 antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Mouse kidney stained with ARG57799 anti-CYP1B1 antibody. Antigen Retrieval: Boil tissue section in 10mM Citrate buffer (pH 6.0) for 20 min followed by cooling at RT.



# ARG57799 anti-CYP1B1 antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Rat kidney stained with ARG57799 anti-CYP1B1 antibody. Antigen Retrieval: Boil tissue section in 10mM Citrate buffer (pH 6.0) for 20 min followed by cooling at RT.