

Anti-CYP1B1 Antibody



Description

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.

Model	STJ115902
Host	Rabbit
Reactivity	Human, Mouse
Applications	IF, IHC, WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 244-543 of human CYP1B1 (NP_000095.2).
Gene ID	1545
Gene Symbol	CYP1B1
Dilution range	WB 1:500 - 1:2000 IHC 1:50 - 1:200 IF 1:50 - 1:200
Tissue Specificity	Expressed in many tissues
Purification	Affinity purification
Note	For Research Use Only (RUO).

Protein Name	Cytochrome P450 1B1
Molecular Weight	60.846 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:2597OMIM:137750Reactome:R-HSA-211976
Alternative Names	Cytochrome P450 1B1
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 concomitant 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,
Cellular Localization	Endoplasmic reticulum membrane