Product Name: CYP1B1 Rabbit Polyclonal Antibody
Catalog #: APRab09632

Summary

Production Name	CYP1B1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	CYP1B1
Alternative Names	CYP1B1; Cytochrome P450 1B1; CYPIB1
Gene ID	1545.0
SwissProt ID	Q16678.Synthesized peptide derived from the Internal region of human CYP1B1.

Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:40000.
Molecular Weight	60kD

Background

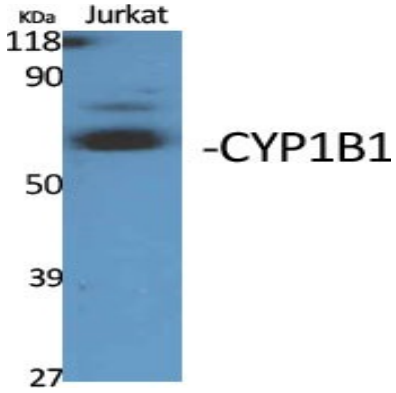
This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are

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],catalytic activity:RH + reduced flavoprotein + O(2) = ROH + oxidized flavoprotein + H(2)O.,cofactor:Heme group.,disease:Defects in CYP1B1 are a cause of Peters anomaly [MIM:604229]. Peters anomaly is a congenital defect of the anterior chamber of the eye.,disease:Defects in CYP1B1 are a cause of primary open angle glaucoma (POAG) [MIM:137760]. POAG is a complex and genetically heterogeneous ocular disorder characterized by a specific pattern of optic nerve and visual field defects. The angle of the anterior chamber of the eye is open, and usually the intraocular pressure is increased. The disease is asymptomatic until the late stages, by which time significant and irreversible optic nerve damage has already taken place. In some cases, POAG shows digenic inheritance involving mutations in CYP1B1 and MYOC genes.,disease:Defects in CYP1B1 are the cause of primary congenital glaucoma type 3A (GLC3A) [MIM:231300]. GLC3A is an autosomal recessive form of primary congenital glaucoma (PCG). PCG is characterized by marked increase of intraocular pressure at birth or early choldhood, large ocular globes (buphthalmos) and corneal edema. It results from developmental defects of the trabecular meshwork and anterior chamber angle of the eye that prevent adequate drainage of aqueous humor.,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, and xenobiotics.,function:Participates in the metabolism of an as-yet-unknown biologically active molecule that is a participant in eye development.,induction:By polycyclic aromatic hydrocarbons (PAH) and 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD).,online information:CYP1B1 alleles,polymorphism:Various CYP1B1 alleles are known. The sequence shown is that of allele CYP1B1*1.,similarity:Belongs to the cytochrome P450 family.,tissue specificity:Expressed in many tissues.,

Research Area

Steroid hormone biosynthesis;Tryptophan metabolism;Metabolism of xenobiotics by cytochrome P450;

Image Data



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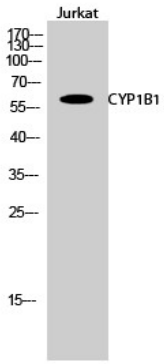
Western Blot analysis of various cells using CYP1B1 Polyclonal Antibody



Western Blot analysis of Jurkat cells using CYP1B1 Polyclonal Antibody

Note

For research use only.