Immunoway
Best Tools for immunology Research

CYP1B1 Polyclonal Antibody

Catalog No :	YT1193
Reactivity :	Human;Rat;Mouse;
Applications :	WB;ELISA
Target :	CYP1B1
Fields :	>>Steroid hormone biosynthesis;>>Tryptophan metabolism;>>Metabolism of xenobiotics by cytochrome P450;>>Ovarian steroidogenesis;>>Chemical carcinogenesis - DNA adducts;>>MicroRNAs in cancer;>>Chemical carcinogenesis - receptor activation;>>Chemical carcinogenesis - reactive oxygen species
Gene Name :	CYP1B1
Protein Name :	Cytochrome P450 1B1
Human Gene Id :	1545
Human Swiss Prot No :	Q16678
Mouse Swiss Prot No :	Q64429
Immunogen :	Synthesized peptide derived from the Internal region of human CYP1B1.
Specificity :	CYP1B1 Polyclonal Antibody detects endogenous levels of CYP1B1 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. ELISA: 1:40000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 60kD

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

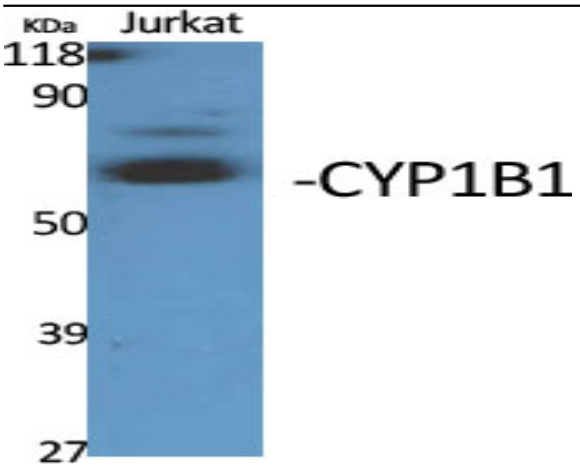
Background : This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. The enzyme encoded by this gene localizes to the endoplasmic 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 : 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

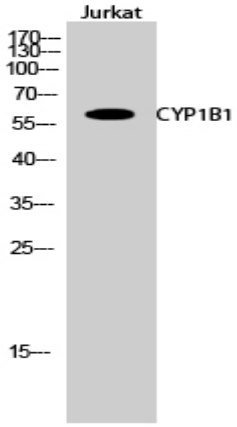
Subcellular Location : Endoplasmic reticulum membrane ; Peripheral membrane protein . Microsome membrane ; Peripheral membrane protein . Mitochondrion . Located primarily in endoplasmic reticulum. Upon treatment with 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD), CYP1B1 is also targeted to mitochondria. .

Expression : Expressed in heart, brain, lung, skeletal muscle, kidney, spleen, thymus, prostate, testis, ovary, small intestine, colon, and peripheral blood leukocytes (PubMed:8175734). Expressed in retinal endothelial cells and umbilical vein endothelial cells (at protein level) (PubMed:19005183).

Products Images



Western Blot analysis of various cells using CYP1B1 Polyclonal Antibody



Western Blot analysis of Jurkat cells using CYP1B1 Polyclonal Antibody