



# CYP1B1 Monoclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| <b>Catalog No</b>                  | YP-mAb-02565                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Applications</b>                | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Gene Name</b>                   | CYP1B1                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Immunogen</b>                   | Synthesized peptide derived from the Internal region of human CYP1B1.                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Specificity</b>                 | CYP1B1 Monoclonal Antibody detects endogenous levels of CYP1B1 protein.                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Source</b>                      | Monoclonal, Mouse,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Purification</b>                | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                             |
| <b>Dilution</b>                    | WB 1:500-1:2000                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Synonyms</b>                    | CP1B;CYPIB1;EC:1.14.14.1;EC:4.2.1.152;GLC3A;CYP1B1;Cytochrome P450 1B1                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Observed Band</b>               | 60kD                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Calculated Molecular Weight</b> | 60kD                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Cell Pathway</b>                | 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. .                                                                                                                                                                         |
| <b>Tissue Specificity</b>          | 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).                                                                                                                                                                   |
| <b>Function</b>                    | 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

#### 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],

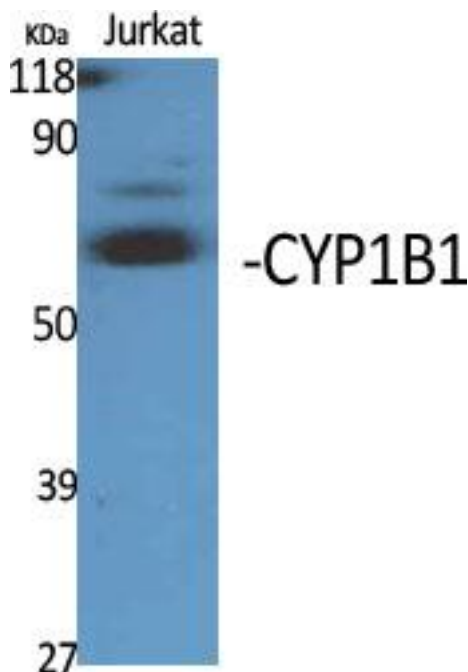
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



Western Blot analysis of various cells using CYP1B1 Monoclonal Antibody