Product datasheet

# Anti-CYP1B1 Antibody

**Catalog Number: *PB9546***

BOSTER
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## Basic Information

| | |
|---|---|
| **Product Name** | Anti-CYP1B1 Antibody |
| **Gene Name** | CYP1B1 |
| **Source** | Rabbit |
| **Isotype** | IgG |
| **Species Reactivity** | human, mouse, rat |
| **Tested Application** | WB, IHC, IHC-F, ICC, FCM |
| **Contents** | 500 ug/ml antibody with PBS， 0.02% NaN3 , 1 mg BSA and 50% glycerol. |
| **Immunogen** | E.coli-derived human CYP1B1 recombinant protein (Position: R255-L480). Human CYP1B1 shares 85.4% and 84.5% amino acid (aa) sequence identity with mouse and rat CYP1B1, respectively. |
| **concentration** | 500 ug/ml |
| **Purification** | Immunogen affinity purified. |
| **Observed MW** | 61KD |
| **Dilution Ratios** | Western blot(WB): 1:500-2000<br>Immunohistochemistry(Paraffin-embedded Section): 1:50-400<br>Immunohistochemistry(Frozen Section): 1:50-400<br>Immunocytochemistry: 1:50-400<br>Flow cytometry (FCM): 1-3 µg/1x$10^6$ cells<br>(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user. |

## Storage

12 months from date of receipt，-20℃ as supplied. 6 months 2 to 8℃ after reconstitution. Avoid repeated freezing and thawing.

## Background Information

Cytochrome P450 1B1 is an enzyme that in humans is encoded by the CYP1B1 gene. CYP1B1 belongs to the 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.

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# Selected Validation Data

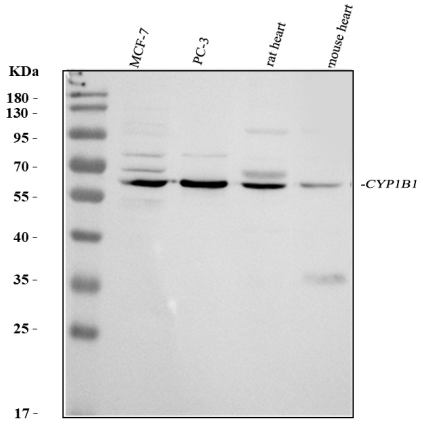


Figure 1. Western blot analysis of anti- CYP1B1 antibody (PB9546). The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: MCF-7 whole cell lysates,
Lane 2: PC-3 whole cell lysates,
Lane 3: rat heart tissue lysates,
Lane 4: mouse heart tissue lysates.
Use rabbit anti- CYP1B1 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for CYP1B1 at approximately 61KD. The expected band size for CYP1B1 is at 61KD.

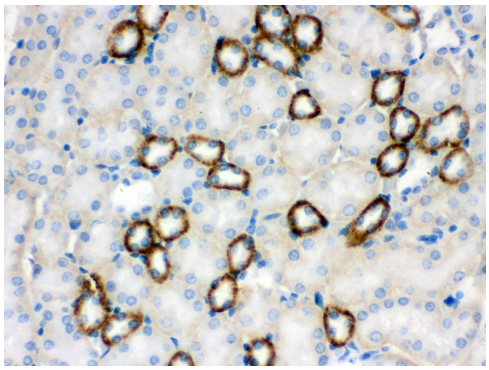

Figure 2. IHC analysis of CYP1B1 using anti-CYP1B1 antibody (PB9546).CYP1B1 was detected in paraffin-embedded section of Mouse Kidney Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-CYP1B1 Antibody (PB9546) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

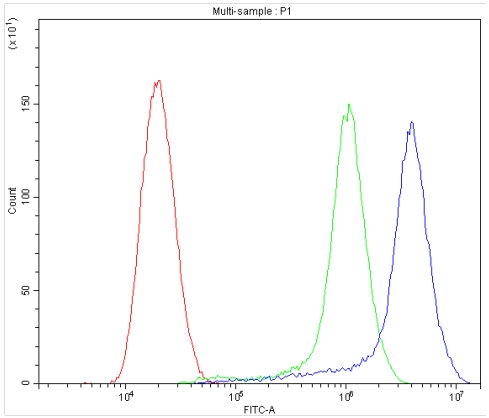


Figure 5. Flow Cytometry analysis of SiHa cells using anti-CYP1B1 antibody (PB9546).Overlay histogram showing SiHa cells stained with PB9546 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CYP1B1 Antibody (PB9546,1µg/1x$10^6$ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10µg/1x$10^6$ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x$10^6$) used under the same conditions. Unlabelled sample (Red line) was also used as a control.