# abcam

### Product datasheet

# Anti-CYP1B1 antibody [EPR14972] - C-terminal ab185954



ייבער RabMAb

#### 16 References 画像数3

#### 製品の概要

製品名 Anti-CYP1B1 antibody [EPR14972] - C-terminal

製品の詳細 Rabbit monoclonal [EPR14972] to CYP1B1 - C-terminal

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P

適用なし: Flow Cyt

種交差性 交差種: Rat, Human

交差が予測される動物種: Mouse 4

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール IHC-P: Human renal adenocarcinoma tissue. WB: Human breast cancer, fetal kidney and fetal

brain lysate; Rat brain and spleen lysate.

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

### 製品の特性

製品の状態

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

精製度 Protein A purified

ポリモノ モノクローナル

クローン名

EPR14972

アイソタイプ

ΙgG

#### アプリケーション

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アプリケーション	Abreviews	特記事項
WB		1/1000 - 1/10000. Detects a band of approximately 61 kDa (predicted molecular weight: 61 kDa).
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

追加情報

Is unsuitable for Flow Cyt.

#### ターゲット情報

機能

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. Participates in the metabolism of an as-yet-unknown biologically active molecule that is a participant in eye development.

組織特異性

関連疾患

Expressed in many tissues.

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 childhood, 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.

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. Defects in CYP1B1 are a cause of Peters anomaly (PAN) [MIM:604229]. Peters anomaly is a

congenital defect of the anterior chamber of the eye.

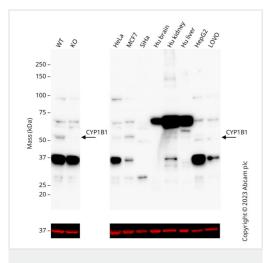
配列類似性

Belongs to the cytochrome P450 family.

細胞内局在

Endoplasmic reticulum membrane. Microsome membrane.

#### 画像



Western blot - Anti-CYP1B1 antibody [EPR14972] - C-terminal (ab185954)

**All lanes :** Anti-CYP1B1 antibody [EPR14972] - C-terminal (ab185954) at 1/5000 dilution

Lane 1: Wild-type A549 cell lysate

Lane 2: CYP1B1 knockout A549 cell lysate

Lane 3 : HeLa cell lysate

Lane 4: MCF7 cell lysate

Lane 5: SiHa cell lysate

Lane 6: Human Brain cell lysate

Lane 7: Human Kidney cell lysate

Lane 8: Human Liver cell lysate

Lane 9: HepG2 cell lysate

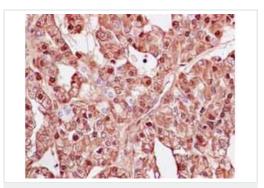
Lane 10: LoVo cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 61 kDa **Observed band size:** 55 kDa

Western blot: Anti-CYP1B1 antibody [EPR14972] (ab185954) staining at 1/5000 dilution, shown in black; Mouse anti-GAPDH antibody [6C5] (ab8245) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab185954 was shown to bind specifically to CYP1B1. A band was observed at 55 kDa in wildtype A549 cell lysates with no signal observed at this size in CYP1B1 knockout cell line ab269476 (knockout cell lysate ab269641). To generate this image, wild-type and CYP1B1 knockout A549 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 5 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times before development with a high-sensitivity ECL substrate kit and imaged with 8 minutes exposure time. Secondary antibodies used were HRP conjugated Goat anti-Rabbit (H+L) and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.

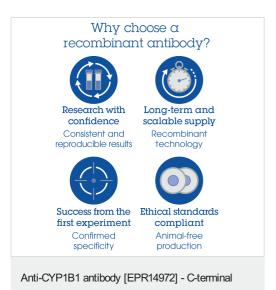


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CYP1B1 antibody

[EPR14972] - C-terminal (ab185954)

Immunohistochemical analysis of paraffin-embedded Human renal adenocarcinoma tissue labeling CYP1B1 with ab185954 at 1/500 dilution followed by pre-diluted HRP-conjugated secondary antibody and counter-stained with Hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



(ab185954)

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