# abcam

## Product datasheet

## Recombinant Human CYP1B1 protein ab114353

## 1 Image

**Description** 

Product name Recombinant Human CYP1B1 protein

Expression system Wheat germ

Accession Q16678

Protein length Protein fragment

Animal free No

Nature Recombinant

**Species** Human

**Sequence** NKDLTSRVMIFSVGKRRCIGEELSKMQLFLFISILAHQCDF

**RANPNEPAK** 

MNFSYGLTIKPKSFKVNVTLRESMELLDSAVQNLQAKETC

Predicted molecular weight 36 kDa including tags

Amino acids 453 to 542

## **Specifications**

Our **Abpromise guarantee** covers the use of **ab114353** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** ELISA

SDS-PAGE Western blot

Form Liquid

## **Preparation and Storage**

**Stability and Storage** Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.3% Glutathione, 0.79% Tris HCI

## **General Info**

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

#### Tissue specificity

Expressed in many tissues.

#### Involvement in 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 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.

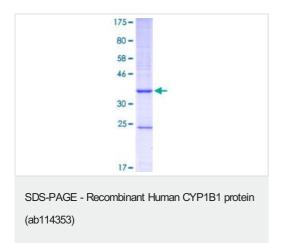
## Sequence similarities

Belongs to the cytochrome P450 family.

## **Cellular localization**

Endoplasmic reticulum membrane. Microsome membrane.

#### **Images**



ab114353 analysed on a 12.5% SDS-PAGE gel stained with Coomassie Blue.

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