## Overview

<table>
<thead>
<tr>
<th>Product name</th>
<th>Anti-CYP1B1 antibody</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Rabbit polyclonal to CYP1B1</td>
</tr>
<tr>
<td>Host species</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Tested applications</td>
<td>Suitable for: IHC-P, IHC-Fr, WB, ICC, ICC/IF</td>
</tr>
<tr>
<td>Species reactivity</td>
<td>Reacts with: Human</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Synthetic peptide conjugated to KLH derived from within residues 450 to the C-terminus of Human CYP1B1. Read Abcam's proprietary immunogen policy(Peptide available as ab33585.)</td>
</tr>
<tr>
<td>Positive control</td>
<td>Human brain tissue lysate.</td>
</tr>
</tbody>
</table>

## Properties

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage instructions</td>
<td>Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.</td>
</tr>
</tbody>
</table>
| Storage buffer| Preservative: 0.02% Sodium azide  
                  Constituent: PBS |
|               | Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help. |
| Purity        | Immunogen affinity purified |
| Clonality     | Polyclonal |
| Isotype       | IgG |

## Applications

Our Abpromise guarantee covers the use of ab33586 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
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
Western blot - Anti-CYP1B1 antibody (ab33586)

Lane 1 : Marker
Lane 2 : Anti-CYP1B1 antibody (ab33586) at 1 µg/ml
Lane 2 : Human brain tissue lysate at 10 µg

Secondary
Lane 2 : IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/15000 dilution

Performed under reducing conditions.

**Predicted band size:** 61 kDa
**Observed band size:** ~70 kDa

*why is the actual band size different from the predicted?*

ab33586 staining CYP1B1 in Human AGS Human gastric carcinoma cultured cells by Immunocytochemistry (ICC). Tissue was fixed with formaldehyde, permeabilized with 0.025% Triton-X in PBS and blocked with 5% serum for 1 hour at 23°C. Samples were incubated with primary antibody (1/1000 in blocking buffer) for 16 hours at 4°C. An undiluted HRP-conjugated Goat anti-rabbit polyclonal was used as the secondary antibody.

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**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Extensive multi-media technical resources to help you
We investigate all quality concerns to ensure our products perform to the highest standards.

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