

# Anti-Cytochrome P450 3A4/CYP3A4 antibody [EPR6202] ab124921

リコンビナント **RabMAb**

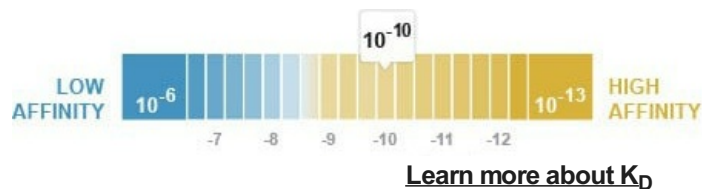
★★★★★ **1 Abreviews** **12 References** 画像数 8

### 製品の概要

製品名	Anti-Cytochrome P450 3A4/CYP3A4 antibody [EPR6202]
製品の詳細	Rabbit monoclonal [EPR6202] to Cytochrome P450 3A4/CYP3A4
由来種	Rabbit
特異性	Cross-reactivity with other CYP3A family: ab124921 has high possibility of reacting with CYP3A7 based on our internal test.
アプリケーション	<b>適用あり:</b> WB, IP, IHC-P
種交差性	<b>交差種:</b> Human
免疫原	Synthetic peptide within Human Cytochrome P450 3A4/CYP3A4 aa 450-550 (C terminal). The exact sequence is proprietary. (Peptide available as <b>ab234892</b> )
ポジティブ・コントロール	WB: Human fetal and liver cell lysates IHC-P: Human liver tissue IP: Human liver cell lysates
特記事項	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <b>see here</b> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <b>RabMAb<sup>®</sup> patents</b> .  Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
解離定数 (K <sub>D</sub> 値)	K <sub>D</sub> = 2.63 x 10 <sup>-10</sup> M



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	EPR6202
アイソタイプ	IgG

## アプリケーション

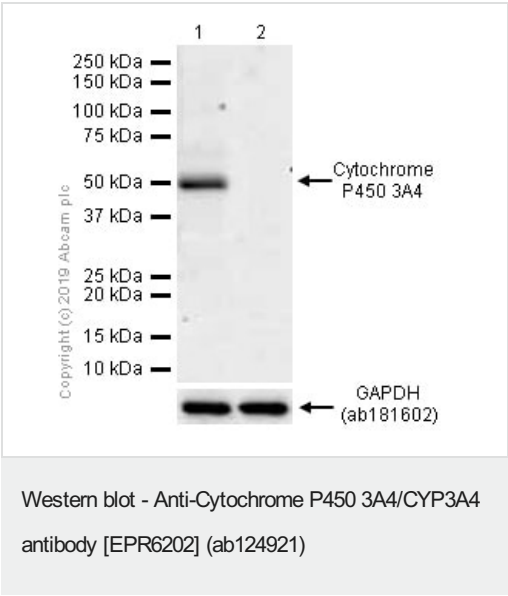
**The Abpromise guarantee**      **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab124921の使用に適用されます  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	★★★★★ (1)	1/1000. Predicted molecular weight: 57 kDa. For unpurified use at 1/10000 - 1/50000 dilution.
IP		1/10 - 1/100.
IHC-P		1/400. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. For unpurified use at 1/100 - 1/250 dilution.  See <a href="#">IHC antigen retrieval protocols</a>

## 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 performs a variety of oxidation reactions (e.g. caffeine 8-oxidation, omeprazole sulfoxidation, midazolam 1'-hydroxylation and midazolam 4-hydroxylation) of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics. The enzyme also hydroxylates etoposide.
組織特異性	Expressed in prostate and liver. According to some authors, it is not expressed in brain (PubMed:19094056). According to others, weak levels of expression are measured in some brain locations (PubMed:19359404 and PubMed:18545703). Also expressed in epithelium of the small intestine and large intestine, bile duct, nasal mucosa, kidney, adrenal cortex, epithelium of the gastric mucosa with intestinal metaplasia, gallbladder, intercalated ducts of the pancreas, chief cells of the parathyroid and the corpus luteum of the ovary (at protein level).
配列類似性	Belongs to the cytochrome P450 family.
翻訳後修飾	Polyubiquitinated in the presence of AMFR and UBE2G1 and also STUB1/CHIP and UBE2D1 (in vitro).

画像



**All lanes :** Anti-Cytochrome P450 3A4/CYP3A4 antibody [EPR6202] (ab124921) at 1/1000 dilution (Purified)

**Lane 1 :** Human liver lysates

**Lane 2 :** HepG2 (Human hepatocellular carcinoma epithelial cell), Whole cell lysate

Lysates/proteins at 20 µg per lane.

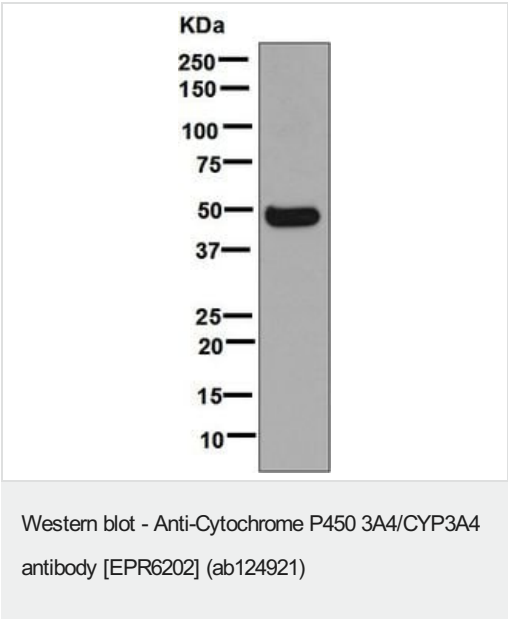
**Secondary**

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 57 kDa

**Observed band size:** 50 kDa

This antibody fails to detect BOI in normal HepG2 cells which is positive reported by PMID 26089940 and 25141173

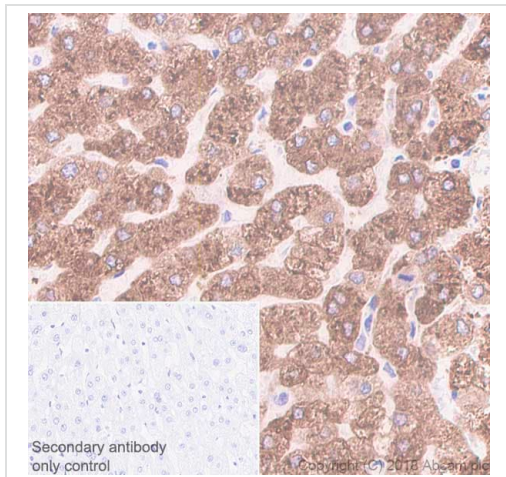


Anti-Cytochrome P450 3A4/CYP3A4 antibody [EPR6202] (ab124921) at 1/10000 dilution ((unpurified)) + Human fetal liver lysate at 10 µg

**Secondary**

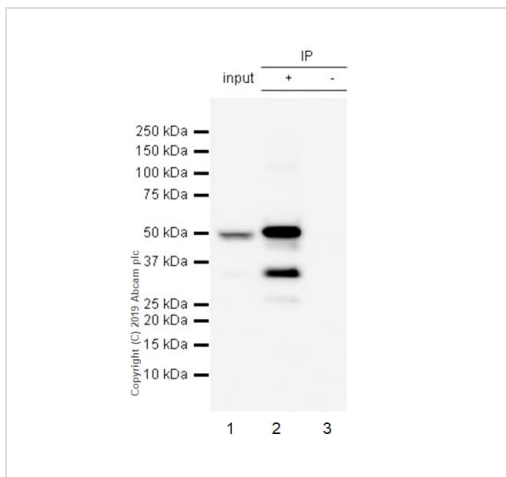
HRP labelled goat anti rabbit at 1/2000 dilution

**Predicted band size:** 57 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cytochrome P450 3A4/CYP3A4 antibody [EPR6202] (ab124921)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human liver tissue sections labeling Cytochrome P450 3A4/CYP3A4 with purified ab124921 at 1/400 dilution (0.35 µg/ml). Perform heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunoprecipitation - Anti-Cytochrome P450 3A4/CYP3A4 antibody [EPR6202] (ab124921)

ab124921 (purified) at 1/20 dilution (1ug) immunoprecipitating Cytochrome P450 3A4/CYP3A4 in Human liver lysates.

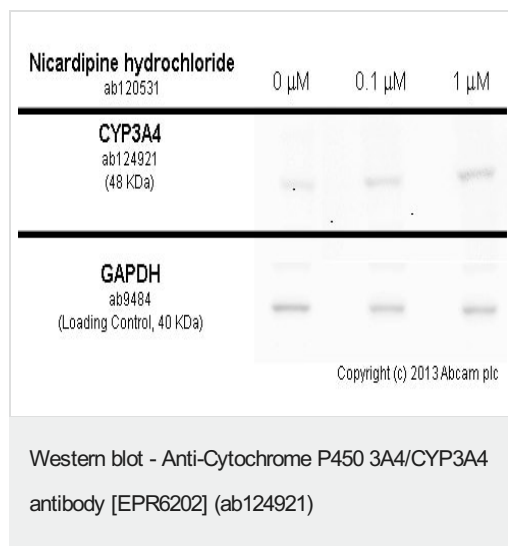
Lane 1: Human liver lysates 10ug

Lane 2 (+): ab124921 & Human liver lysates

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab124921 in Human liver lysates

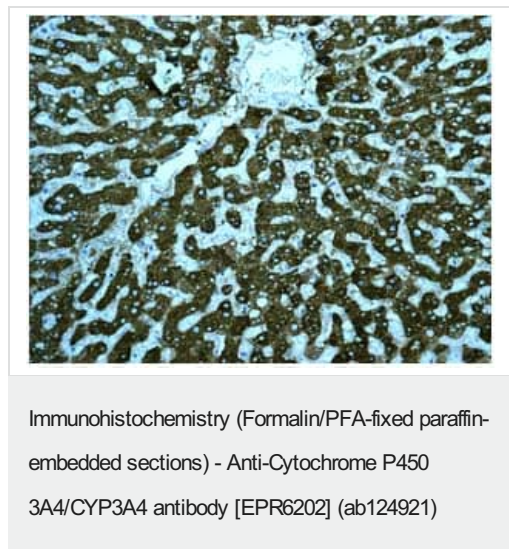
For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was at 1/1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.

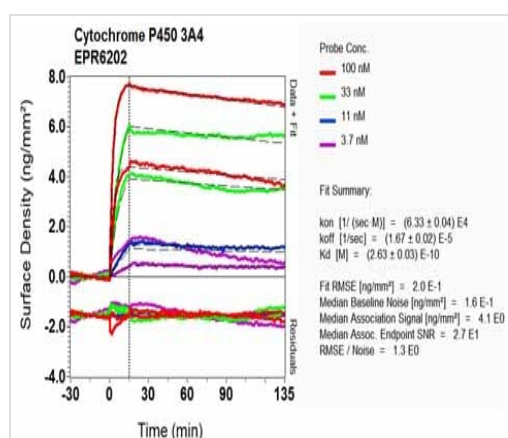


HepG2 cells were incubated at 37°C for 48h with vehicle control (0  $\mu$ M) and different concentrations of nicardipine hydrochloride (**ab120531**) in DMSO. Increased expression of Cytochrome P450 3A4/CYP3A4 (ab124921, unpurified) correlates with an increase in nicardipine hydrochloride concentration, as described in literature.

Whole cell lysates were prepared with RIPA buffer (containing protease inhibitors and sodium orthovanadate), 10 $\mu$ g of each were loaded on the gel and the WB was run under reducing conditions. After transfer the membrane was blocked for an hour using 5% BSA before being incubated with ab124921 (unpurified) at 1/10000 dilution and **ab9484** at 1  $\mu$ g /ml overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP (**ab97051**) at 1/10000 dilution and visualised using ECL development solution.



ab124921 (unpurified), at a 1/100 dilution, staining Cytochrome P450 3A4/CYP3A4 in paraffin embedded Human liver tissue by Immunohistochemistry.



OI-RD Scanning - Anti-Cytochrome P450 3A4/CYP3A4 antibody [EPR6202] (ab124921)

Equilibrium disassociation constant ( $K_D$ )

Learn more about  $K_D$

[Click here to learn more about  \$K\_D\$](#)

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Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Cytochrome P450 3A4/CYP3A4 antibody  
[EPR6202] (ab124921)

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