

Product datasheet

Anti-P Glycoprotein antibody [EPR10364] ab168337

KO VALIDATED Recombinant RabMAb

★☆☆☆☆ [2 Abreviews](#) [8 References](#) [8 Images](#)

Overview

Product name	Anti-P Glycoprotein antibody [EPR10364]
Description	Rabbit monoclonal [EPR10364] to P Glycoprotein
Host species	Rabbit
Specificity	<p>P-glycoprotein 1 (also known as Multidrug resistance protein 1) has a predicted molecular weight of 141 kDa, however it has 3 potential glycosylation sites (N-linked) which may affect the migration of the protein. In our hands ab168337 detects a predominant protein band migrating in the region of 180-200 kDa and typically will demonstrate a smear on the membrane in the region of the 150 – 300 kDa due to the glycosylation profile of the protein. It may be necessary to optimise your cell or tissue lysis protocol to efficiently extract P-glycoprotein 1 as it is a multi-pass membrane protein. Abcam recommends not boiling the sample after lysis.</p>
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment corresponding to Human P Glycoprotein.
Positive control	HeLa, HepG2, 293T, C6 and Human fetal brain and Mouse brain lysates, Human kidney & liver tissue
General notes	<p>The mouse and rat recommendation is based on the WB results. This antibody may not be suitable for IHC with mouse or rat samples.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	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.

Storage buffer

Preservative: 0.01% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS

Purity

Protein A purified

Clonality

Monoclonal

Clone number

EPR10364

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab168337 in the following tested applications.

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

Application	Abreviews	Notes
WB	★☆☆☆☆ (1)	1/2000. Predicted molecular weight: 141 kDa. For optimal detection Abcam recommends not boiling the sample after lysis.
IHC-P		1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <u>IHC antigen retrieval protocols</u> .

Target

Function

Energy-dependent efflux pump responsible for decreased drug accumulation in multidrug-resistant cells.

Tissue specificity

Expressed in liver, kidney, small intestine and brain.

Involvement in disease

Genetic variations in ABCB1 are associated with susceptibility to inflammatory bowel disease type 13 (IBD13) [MIM:612244]. Inflammatory bowel disease is characterized by a chronic relapsing intestinal inflammation. It is subdivided into Crohn disease and ulcerative colitis phenotypes. Crohn disease may involve any part of the gastrointestinal tract, but most frequently the terminal ileum and colon. Bowel inflammation is transmural and discontinuous; it may contain granulomas or be associated with intestinal or perianal fistulas. In contrast, in ulcerative colitis, the inflammation is continuous and limited to rectal and colonic mucosal layers; fistulas and granulomas are not observed. Both diseases include extraintestinal inflammation of the skin, eyes, or joints. Crohn disease and ulcerative colitis are commonly classified as autoimmune diseases.

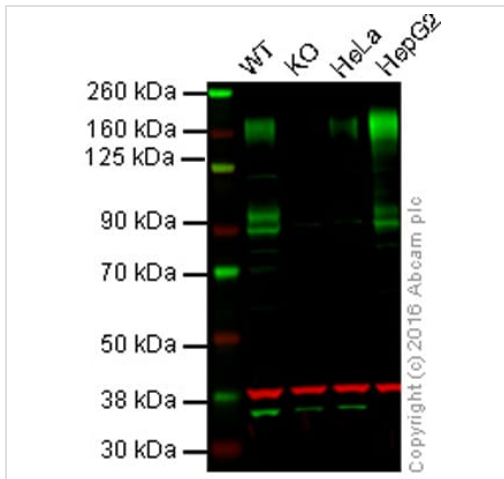
Sequence similarities

Belongs to the ABC transporter superfamily. ABCB family. Multidrug resistance exporter (TC 3.A.1.201) subfamily.
Contains 2 ABC transmembrane type-1 domains.
Contains 2 ABC transporter domains.

Cellular localization

Membrane.

Images



Western blot - Anti-P Glycoprotein antibody [EPR10364] (ab168337)

Lane 1: Wild-type HAP1 cell lysate (20 µg)

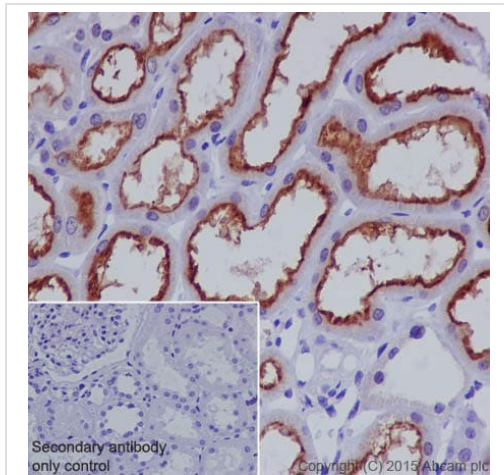
Lane 2: P glycoprotein knockout HAP1 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

Lane 4: HepG2 cell lysate (20 µg)

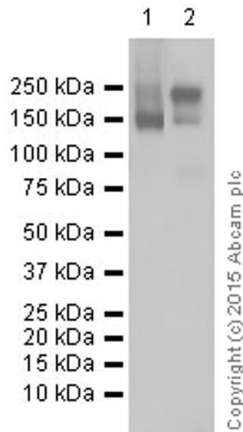
Lanes 1 - 4: Merged signal (red and green). Green - ab168337 observed at 160 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab168337 was shown to recognize P glycoprotein when P glycoprotein knockout samples were used, along with additional cross-reactive bands. Wild-type and P glycoprotein knockout samples were subjected to SDS-PAGE. ab168337 and **ab8245** (loading control to GAPDH) were diluted 1/500 and 1/10 000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-P Glycoprotein antibody [EPR10364] (ab168337)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue sections labeling P Glycoprotein with purified ab168337 at 1/100 dilution (14 µg/ml). Heat mediated antigen retrieval was performed using EDTA Buffer, PH9. Hematoxylin was used to counter stain. **ab97051**, a Goat Anti-Rabbit IgG H&L (HRP) secondary antibody was used at 1/500 dilution. PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-P Glycoprotein antibody [EPR10364] (ab168337)

All lanes : Anti-P Glycoprotein antibody [EPR10364] (ab168337) at 1/2000 dilution (purified)

Lane 1 : Mouse brain lysate

Lane 2 : C6 (Rat glial tumor cell line) cell lysate

Lysates/proteins at 10 µg per lane.

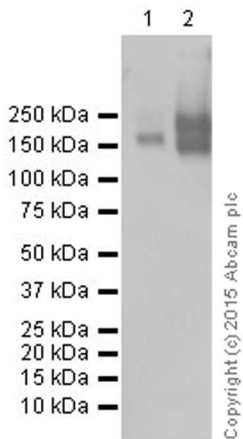
Secondary

All lanes : Goat Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 141 kDa

Observed band size: 180 kDa

Blocking and diluting buffer: 5% NFDm/TBST.



Western blot - Anti-P Glycoprotein antibody [EPR10364] (ab168337)

All lanes : Anti-P Glycoprotein antibody [EPR10364] (ab168337) at 1/2000 dilution (purified)

Lane 1 : HeLa (human cervix adenocarcinoma) whole cell lysate

Lane 2 : HepG2 (human hepatocellular carcinoma) whole cell lysate

Lysates/proteins at 10 µg per lane.

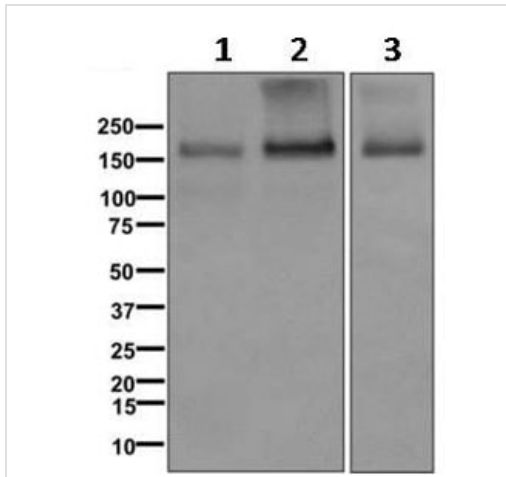
Secondary

All lanes : Goat Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 141 kDa

Observed band size: 180 kDa

Blocking and diluting buffer: 5% NFDm/TBST.



Western blot - Anti-P Glycoprotein antibody [EPR10364] (ab168337)

All lanes : Anti-P Glycoprotein antibody [EPR10364] (ab168337) at 1/1000 dilution (unpurified)

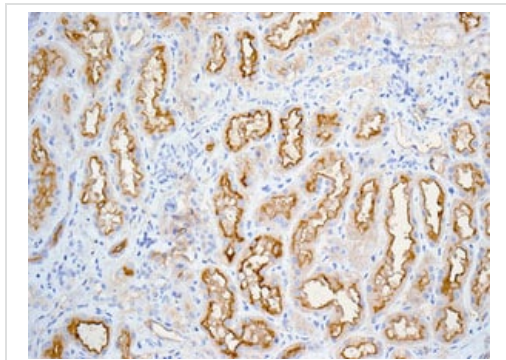
Lane 1 : HeLa cell lysates

Lane 2 : 293T cell lysates

Lane 3 : Human fetal brain lysates

Lysates/proteins at 10 µg per lane.

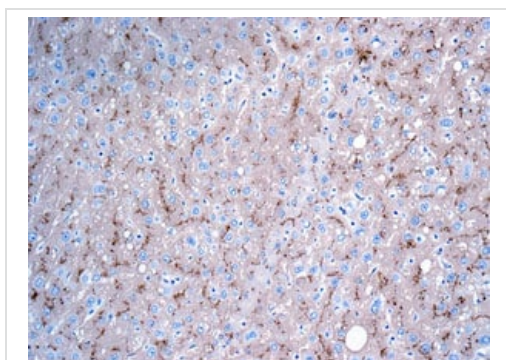
Predicted band size: 141 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-P Glycoprotein antibody [EPR10364] (ab168337)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling P Glycoprotein with unpurified ab168337 at 1/50 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-P Glycoprotein antibody [EPR10364] (ab168337)

Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling P Glycoprotein with unpurified ab168337 at 1/50 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Why choose a recombinant antibody?



Research with confidence
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-P Glycoprotein antibody [EPR10364]
(ab168337)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors