

P-Glycoprotein Monoclonal Antibody (F4)

Product Details

Size	500 µL
Species Reactivity	Hamster, Human
Published Species	Rat, Human, Mouse
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	F4
Conjugate	Unconjugated
Immunogen	Human and hamster drug-resistant viable cells followed by crude plasma membranes
Form	Liquid
Concentration	0.2 mg/mL
Purification	Protein G
Storage buffer	PBS, pH 7.4, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_10979045

Applications	Tested Dilution	Publications
Western Blot (WB)	1:10-1:200	12 Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Immunocytochemistry (ICC/IF)	1:10-1:100	12 Publications
Flow Cytometry (Flow)	2 µg/test	2 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

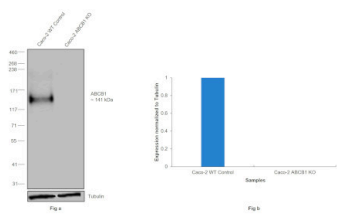
MA5-13854 targets p170 in FACS, WB and ICC/IF applications and shows reactivity with Hamster and Human samples. This antibody does not react with mouse tissue in Western blot applications.

The MA5-13854 immunogen is human and hamster drug-resistant viable cells followed by crude plasma membranes.

Product Images For P-Glycoprotein Monoclonal Antibody (F4)

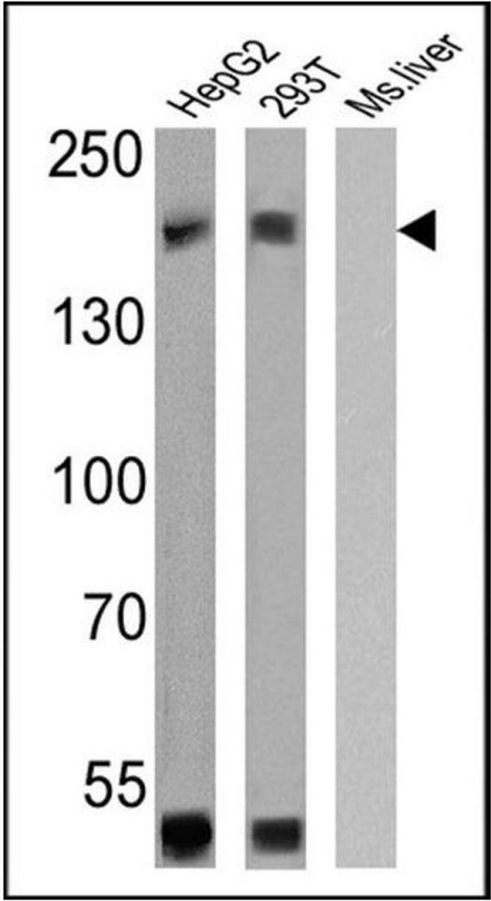
P-Glycoprotein Antibody (MA5-13854)

Antibody specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. A loss of signal was observed for target protein in ABCB1 KO cell line compared to control cell line using P-Glycoprotein Monoclonal Antibody (F4) (Product # MA513854). {KO}



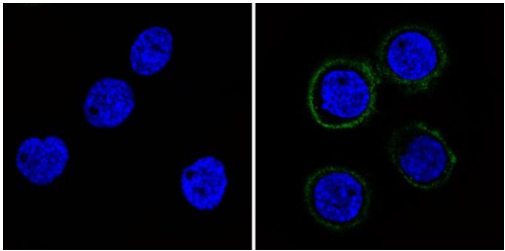
P-Glycoprotein Antibody (MA5-13854) in WB

Western blot analysis of p170 was performed by loading 25 µg of HepG2 (lane 1), 293T (lane 2) and mouse liver (lane 3) cell lysates onto an SDS polyacrylamide gel. Proteins were transferred to a PVDF membrane and blocked at 4°C overnight. The membrane was probed with a p170 monoclonal antibody (Product # MA5-13854) at a dilution of 1:100 overnight at 4°C, washed in TBST, and probed with an HRP-conjugated secondary antibody for 1 hr at room temperature in the dark. Chemiluminescent detection was performed using Pierce ECL Plus Western Blotting Substrate (Product # 32132). Results show a band at ~170 kDa in HepG2 and 293T cells.



P-Glycoprotein Antibody (MA5-13854) in ICC/IF

Immunofluorescent analysis of p170 (green) showing staining in the membrane of A431 cells (right) compared to a negative control without primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with a p170 monoclonal antibody (Product # MA5-13854) in 3% BSA-PBS at a dilution of 1:20 and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with Hoechst or DAPI. Images were taken at a magnification of 60x.



View more figures on thermofisher.com

Western Blot (12)

<p>Acta naturae</p> <p>Mechanisms of P-Glycoprotein Regulation Under Exogenous and Endogenous Oxidative Stress In Vitro.</p> <p>"MA5-13854 was used in Western Blotting to investigate the mechanisms of P-glycoprotein (P-gp) transporter regulation in Caco-2 cells under exogenous and endogenous oxidative stress (OS)."</p> <p>Authors: Abalenikhina YV,Shchulkin AV,Mylnikov PY,Rokunov ED,Yakusheva EN</p>	<p>Year 2022</p> <p>Species Human</p> <p>Dilution 1:200</p>
<p>International journal of molecular sciences</p> <p>The Ubiquitin E3 Ligase Nedd4 Regulates the Expression and Amyloid-Peptide Export Activity of P-Glycoprotein.</p> <p>"Published figure using P-Glycoprotein monoclonal antibody (Product # MA5-13854) in Western Blot"</p> <p>Authors: Chai AB,Callaghan R,Gelissen IC</p>	<p>Year 2022</p>

View more WB references on thermofisher.com

Immunohistochemistry (1)

<p>Acta orthopaedica et traumatologica turcica</p> <p>[The effect of resistance-related proteins on the prognosis and survival of patients with osteosarcoma: an immunohistochemical analysis].</p> <p>"MA5-13854 was used in immunohistochemistry to examine the prognostic significance of multiple genes in osteosarcoma"</p> <p>Authors: Ozger H,Eralp L,Atalar AC,Toker B,Esberk Ate L,Sungur M,Bilgiç B,Ayan I</p>	<p>Year 2009</p> <p>Species Human</p>
---	---

Immunohistochemistry (Paraffin) (1)

<p>Gland surgery</p> <p>Detection and analysis of multiple biomarkers in ovarian cancer: clinical significance in diagnosis, treatment, and prognosis evaluation.</p> <p>"MA5-13854 was used in Immunohistochemistry (Paraffin) to explore the clinical significance of CA125, CK7, CK20, ER, PR, C-erbB2, and P-gp in ovarian cancer."</p> <p>Authors: Ji R,Li Y,He C,Zhu X,He A,Lu Y</p>	<p>Year 2020</p> <p>Species Human</p>
---	---

More applications with references on thermofisher.com

- ICC/IF (12)
- Flow (2)
- Misc (1)

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.