

ATP1A1 Monoclonal Antibody (M7-PB-E9)

Product Details

Size	400 µL
Species Reactivity	Bovine, Dog, Chicken, Human, Mouse, Sheep, Pig, Rat
Published Species	Dog, Rabbit, Rat, Pig, Sheep, Mouse, Human
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	M7-PB-E9
Conjugate	Unconjugated
Immunogen	Purified alpha sodium/potassium ATPase from sheep kidney.
Form	Liquid
Concentration	1.87 mg/mL
Purification	Protein A
Storage buffer	PBS with 1mg/mL BSA
Contains	0.05% sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2060976

Applications	Tested Dilution	Publications
Western Blot (WB)	1:500-1:5,000	15 Publications
Immunohistochemistry (IHC)	-	7 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:100	-
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunocytochemistry (ICC/IF)	Assay-dependent	4 Publications
Flow Cytometry (Flow)	-	1 Publication
ELISA (ELISA)	Assay-dependent	-
Immunoprecipitation (IP)	Assay-dependent	1 Publication
Immunomicroscopy (IM)	-	1 Publication

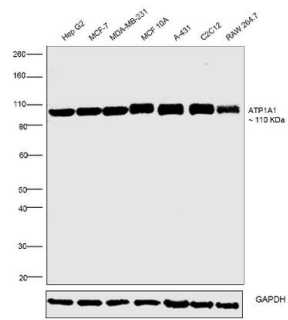
Product Specific Information

MA3-928 detects sodium/potassium ATPase alpha from human, mouse, bovine, sheep, canine, chicken and porcine tissues. This antibody detects the alpha 3 isoform in rat only.

MA3-928 has been successfully used in Western blot, immunohistochemistry, immunoprecipitation, immunocytochemistry, immunofluorescence, and ELISA procedures. By Western blot, this antibody detects an ~110 kDa protein representing alpha sodium/potassium ATPase from MDCK cell extract. Immunohistochemical staining of alpha sodium/potassium ATPase in porcine heart with MA3-928 yields a pattern consistent with the plasma membrane localization.

The MA3-928 antigen is purified sheep kidney alpha sodium/potassium ATPase. This antibody recognizes an epitope between amino acid residues 646 and 652 of the sheep kidney alpha sodium/potassium ATPase.

Product Images For ATP1A1 Monoclonal Antibody (M7-PB-E9)

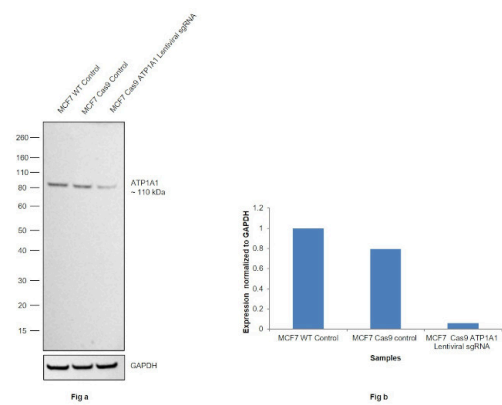


ATP1A1 Antibody (MA3-928) in WB

Western blot was performed using Anti-ATP1A1 Monoclonal Antibody(Product # MA3-928) and 110 kDa band corresponding to ATP1A1 was observed across the cell lines tested. Membrane Enriched extracts (30ug lysate) of Hep G2 (Lane 1), MCF-7 (Lane 2), MDA-MB-231 (Lane 3), MCF 10A (Lane 4), A-431 (Lane 5), C2C12 (Lane 6) and RAW 264.7 (Lane 7) were electrophoresed using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0322BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:1000 dilution) and detected by chemiluminescence with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177, 1:4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005)..

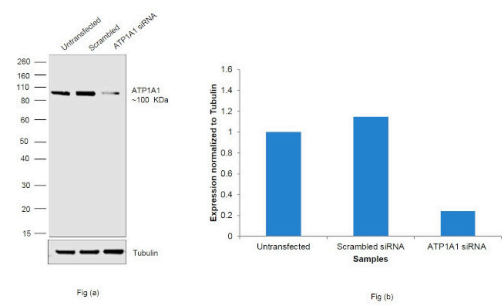
ATP1A1 Antibody (MA3-928)

Antibody specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. A reduced signal was observed for target protein in MCF7 Cas9 cell line transduced with ATP1A1 Lentiviral sgRNA compared to control cell line using a ATP1A1 Monoclonal Antibody (M7-PB-E9) (Product # MA3-928). {KO}



ATP1A1 Antibody (MA3-928)

Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. MDA-MB-231 cells were transfected with ATP1A1 siRNA and decrease in signal intensity was observed in western blot application using Anti-ATP1A1 Monoclonal Antibody (Product # MA3-928). {KD}



View more figures on thermofisher.com

30 References

Western Blot (15)

Cancer cell international	Year 2023
Novel monoclonal antibodies against thymidine kinase 1 and their potential use for the immunotargeting of lung, breast and colon cancer cells.	Species Human
"Published figure using ATP1A1 monoclonal antibody (Product # MA3-928) in Western Blot"	
Authors: Velazquez EJ,Brindley TD,Shrestha G,Bitter EE,Cress JD,Townsend MH,Berges BK,Robison RA,Weber KS, O'Neill KL	

Glia

Norepinephrine activates α_1 -adrenergic receptors at the inner nuclear membrane in astrocytes.

"MA3-928 was used in Western Blotting to reveal a novel mechanism by which norepinephrine may directly influence nuclear processes."

Authors: Benton KC,Wheeler DS,Kurtoglu B,Ansari MBZ,Cibich DP,Gonzalez DA,Herbst MR,Khursheed S,Knorr RC,Lobner D,Maglasang JG,Rohr KE,Taylor A,Twining RC,Witt PJ,Gasser PJ

Year
2022

Species
Mouse

Dilution
1:5000

[View more WB references on thermofisher.com](#)

Immunohistochemistry (7)

Frontiers in cell and developmental biology

Deletion of *Asrgl1* Leads to Photoreceptor Degeneration in Mice.

"MA3-928 was used in Immunohistochemistry to provide a knockout mouse model for a better understanding of the molecular mechanism for ASRGL1-related RP."

Authors: Zhou Y,Tian W,Jiang X,Yang H,Jiang Z,Li X,Jiang D,Sun K,Yang Y,Liu W,Zhu X

Year
2022

Species
Mouse

Human molecular genetics

Deletion of the *Impg2* gene causes the degeneration of rod and cone cells in mice.

"MA3-928 was used in Immunohistochemistry to develop two independent *Impg2* knockout (KO) mouse models using the CRISPR/Cas9 technique to assess the in vivo functions of *Impg2* in the retina."

Authors: Xu H,Qu C,Gan L,Sun K,Tan J,Liu X,Jiang Z,Tian W,Liu W,Zhang S,Yang Y,Jiang L,Zhu X,Zhang L

Year
2020

Species
Mouse

Dilution
1:500

[View more IHC references on thermofisher.com](#)

More applications with references on thermofisher.com

- IHC (F) (1)
- ICC/IF (4)
- Flow (1)
- IP (1)
- IM (1)

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