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ATP1A2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5828c

Product Information

Application	WB, IHC-P, IF, FC, E
Primary Accession	P50993
Other Accession	P06686, D2WKD8, Q6PIE5, A2VDL6, NP_000693.1
Reactivity	Human, Mouse
Predicted	Mouse, Bovine, Rat, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB19033
Calculated MW	112265
Antigen Region	451-479

Additional Information

Gene ID	477
Other Names	Sodium/potassium-transporting ATPase subunit alpha-2, Na(+)/K(+) ATPase alpha-2 subunit, Sodium pump subunit alpha-2, ATP1A2, KIAA0778
Target/Specificity	This ATP1A2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 451-479 amino acids from the Central region of human ATP1A2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ATP1A2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ATP1A2 (HGNC:800)
Synonyms	KIAA0778

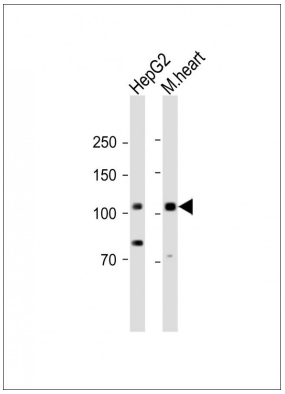
Function

Catalytic subunit of the Na(+)/K(+)-ATPase that hydrolyzes ATP to exchange ions across the plasma membrane, exporting 3 Na(+) and importing 2 K(+) per cycle (PubMed:33880529). It undergoes ATP-driven conformational changes that allow alternating binding and release of Na(+) and K(+) ions across the membrane (By similarity). This process maintains essential Na(+) and K(+) gradients for membrane potential and cellular function (PubMed:33880529).

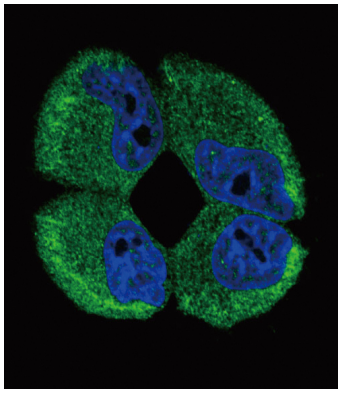
Cellular Location

Membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein

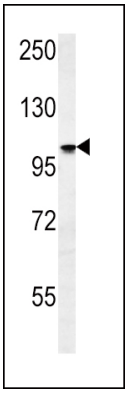
Images



All lanes: Anti-ATP1A2 Antibody (Center) at 1:2000 dilution Lane 1: HepG2 whole cell lysate Lane 2: Mouse heart lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 112 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

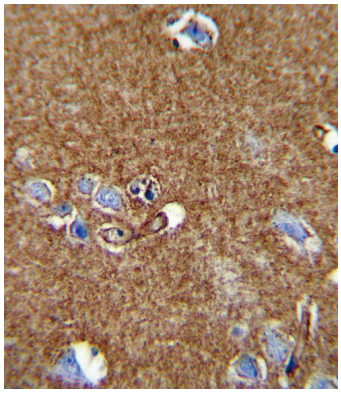


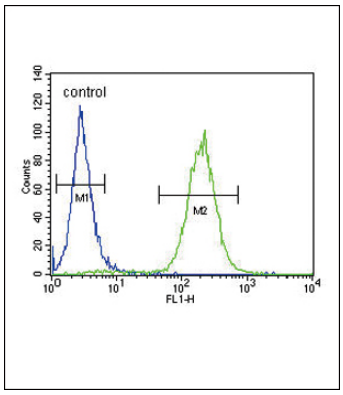
Confocal immunofluorescent analysis of ATP1A2 Antibody (Center)(Cat. #AP5828c) with MCF-7 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).



ATP1A2 Antibody (Center) (Cat. #AP5828c) western blot analysis in MCF-7 cell line lysates (15ug/lane).This demonstrates the ATP1A2 antibody detected ATP1A2 protein (arrow).

ATP1A2 Antibody (Center) (Cat. #AP5828c) immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the ATP1A2 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.





ATP1A2 Antibody (Center) (Cat. #AP5828c) flow cytometric analysis of MCF-7 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- mGluR3 Activation Recruits Cytoplasmic TWIK-1 Channels to Membrane that Enhances Ammonium Uptake in Hippocampal Astrocytes.
- Genetic Deletion of TREK-1 or TWIK-1/TREK-1 Potassium Channels does not Alter the Basic Electrophysiological Properties of Mature Hippocampal Astrocytes In Situ.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.