

ATP1A1 Antibody (aa5-54)
Rabbit Polyclonal Antibody
Catalog # ALS14721

Specification

ATP1A1 Antibody (aa5-54) - Product Information

Application	IF, WB, IHC
Primary Accession	P05023
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	113kDa KDa

ATP1A1 Antibody (aa5-54) - Additional Information

Gene ID 476

Other Names

Sodium/potassium-transporting ATPase subunit alpha-1, Na(+)/K(+) ATPase alpha-1 subunit, 3.6.3.9, Sodium pump subunit alpha-1, ATP1A1

Target/Specificity

ATPase antibody detects endogenous levels of total ATPase protein.

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions

ATP1A1 Antibody (aa5-54) is for research use only and not for use in diagnostic or therapeutic procedures.

ATP1A1 Antibody (aa5-54) - Protein Information

Name ATP1A1

Function

This is the catalytic component of the active enzyme, which catalyzes the hydrolysis of ATP coupled with the exchange of sodium and potassium ions across the plasma membrane. This action creates the electrochemical gradient of sodium and potassium ions, providing the energy for active transport of various nutrients (PubMed:29499166, PubMed:30388404). Could also be part of an osmosensory signaling pathway that senses body-fluid sodium levels and controls salt intake behavior as well as voluntary water intake to regulate sodium homeostasis (By similarity).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:Q8VDN2}; Multi-pass membrane protein. Basolateral cell

membrane {ECO:0000250|UniProtKB:P06685}; Multi-pass membrane protein. Cell membrane, sarcolemma; Multi-pass membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:P06685}. Melanosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV

Volume

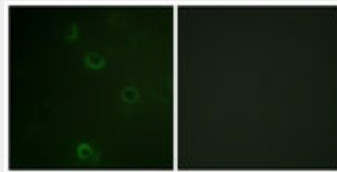
50 μ l

ATP1A1 Antibody (aa5-54) - Protocols

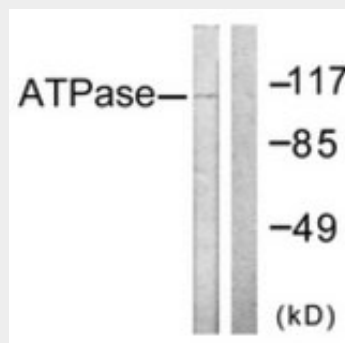
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

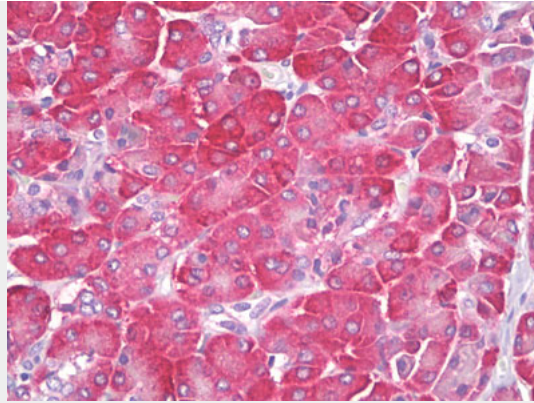
ATP1A1 Antibody (aa5-54) - Images



Immunofluorescence of COS7 cells, using ATPase antibody.



Western blot of extracts from 293 cells, treated with PMA 125 ng/ml 30', using ATPase antibody.



Anti-ATP1A1 antibody IHC of human pancreas.

ATP1A1 Antibody (aa5-54) - Background

This is the catalytic component of the active enzyme, which catalyzes the hydrolysis of ATP coupled with the exchange of sodium and potassium ions across the plasma membrane. This action creates the electrochemical gradient of sodium and potassium ions, providing the energy for active transport of various nutrients.

ATP1A1 Antibody (aa5-54) - References

- Kawakami K., et al. J. Biochem. 100:389-397(1986).
- Ruiz A., et al. Gene 155:179-184(1995).
- Ota T., et al. Nat. Genet. 36:40-45(2004).
- Gregory S.G., et al. Nature 441:315-321(2006).
- Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.