

**ATP1A4 Antibody (N-Term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP22300a**

**Specification**

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**ATP1A4 Antibody (N-Term) - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB, FC,E               |
| Primary Accession | <a href="#">Q13733</a> |
| Reactivity        | Human                  |
| Host              | Rabbit                 |
| Clonality         | polyclonal             |
| Isotype           | Rabbit IgG             |
| Calculated MW     | 114166                 |
| Antigen Region    | 12-46                  |

**ATP1A4 Antibody (N-Term) - Additional Information**

**Gene ID** 480

**Other Names**

Sodium/potassium-transporting ATPase subunit alpha-4, Na(+)/K(+) ATPase alpha-4 subunit, 3.6.3.9, Sodium pump subunit alpha-4, ATP1A4, ATP1AL2

**Target/Specificity**

This ATP1A4 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 12-46 amino acids from the human region of human ATP1A4.

**Dilution**

WB~~1:2000

FC~~1:25

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**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**

ATP1A4 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ATP1A4 Antibody (N-Term) - Protein Information**

**Name** ATP1A4 ([HGNC:14073](#))

**Synonyms** ATP1AL2

**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. Plays a role in sperm motility.

#### Cellular Location

Cell membrane; Multi-pass membrane protein. Note=In mature sperm, located in the principle piece of the sperm flagellum

#### Tissue Location

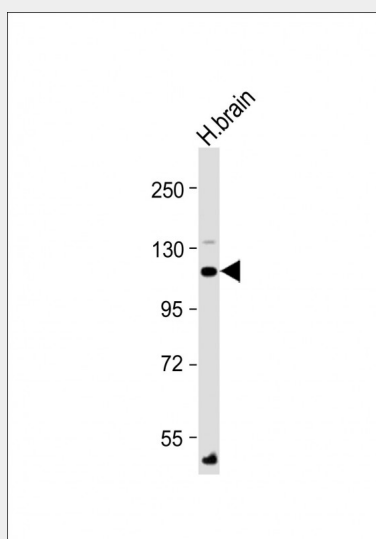
Specifically expressed in testis. Found in very low levels in skeletal muscle. Expressed in mature sperm (at protein level)

### ATP1A4 Antibody (N-Term) - Protocols

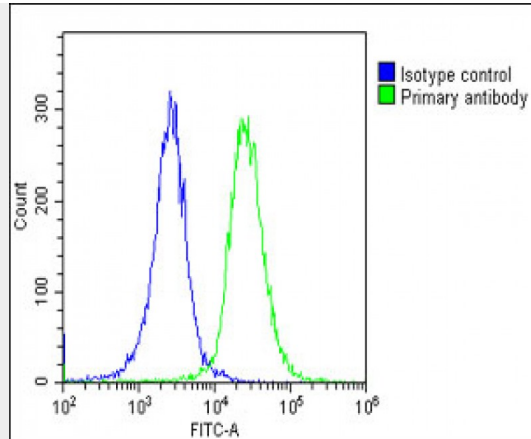
Provided below are standard protocols that you may find useful for product applications.

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

### ATP1A4 Antibody (N-Term) - Images



Anti-ATP1A4 Antibody (N-Term) at 1:2000 dilution + Human brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 114 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing HeLa cells stained with AP22300a (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22300a, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed (OE188374) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >10,000 events was performed.

#### **ATP1A4 Antibody (N-Term) - 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. Plays a role in sperm motility.

#### **ATP1A4 Antibody (N-Term) - References**

- Hlivko J.T., et al. Mol. Reprod. Dev. 73:101-115(2006).
- Gregory S.G., et al. Nature 441:315-321(2006).
- Keryanov S., et al. Gene 292:151-166(2002).
- Shamraj O.I., et al. Proc. Natl. Acad. Sci. U.S.A. 91:12952-12956(1994).
- Ota T., et al. Nat. Genet. 36:40-45(2004).