

**FXYD7 Antibody**  
Catalog # ASC11369**Specification****FXYD7 Antibody - Product Information**

Application	WB, IHC-P, IF, E
Primary Accession	<a href="#">P58549</a>
Other Accession	<a href="#">AAH18619</a> , <a href="#">11612659</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	FXYD7 antibody can be used for detection of FXYD7 by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.

**FXYD7 Antibody - Additional Information**

Gene ID 53822

**Target/Specificity**

FXYD7; FXYD7 antibody is human, mouse and rat reactive. FXYDY7 antibody is predicted to not react with other members of the FXDY protein family

**Reconstitution & Storage**

FXYD7 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

**Precautions**

FXYD7 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**FXYD7 Antibody - Protein Information**

Name FXYD7

**Function**

Associates with and regulates the activity of the sodium/potassium-transporting ATPase (NKA) which catalyzes the hydrolysis of ATP coupled with the exchange of Na(+) and K(+) ions across the plasma membrane (PubMed: [33231612](http://www.uniprot.org/citations/33231612)). Reduces the apparent affinity for external K(+), an effect that depends on the presence of external Na(+) and voltage (PubMed: [33231612](http://www.uniprot.org/citations/33231612)). Increases the apparent affinity for intracellular Na(+) (PubMed: [33231612](http://www.uniprot.org/citations/33231612)).

### Cellular Location

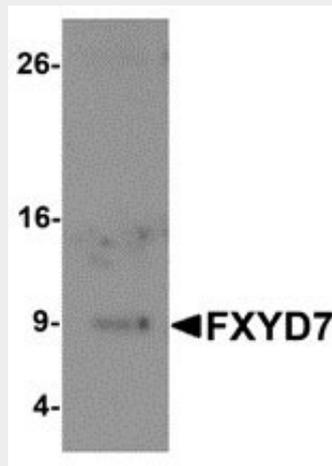
Cell membrane {ECO:0000250|UniProtKB:P59648}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P59648} Note=Able to translocate to the plasma membrane independent of its association with NKA (in vitro). {ECO:0000250|UniProtKB:P59649}

### FXYD7 Antibody - Protocols

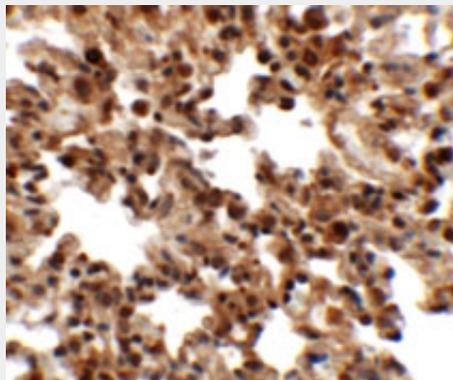
Provided below are standard protocols that you may find useful for product applications.

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

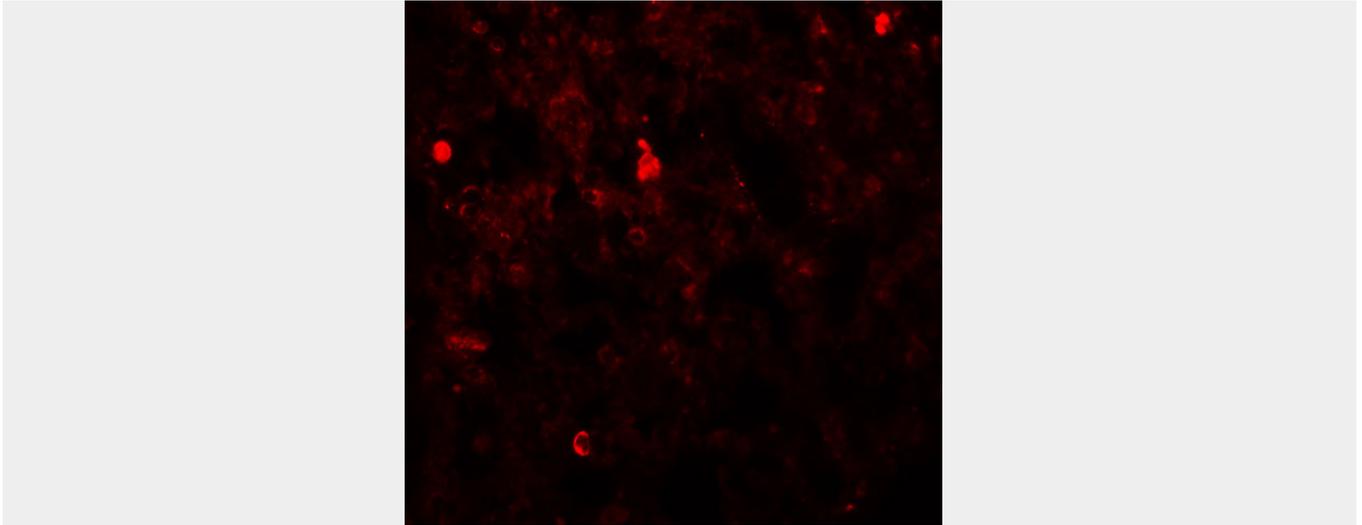
### FXYD7 Antibody - Images



Western blot analysis of FXYD7 in human lung tissue lysate with FXYD7 antibody at 1  $\mu$ g/mL.



Immunohistochemistry of FXYD7 in rat lung tissue with FXYD7 antibody at 2.5  $\mu$ g/mL.



Immunofluorescence of FXYD4 in rat lung tissue with FXYD4 antibody at 20  $\mu$ g/mL.

### **FXYD7 Antibody - Background**

**FXYD7 Antibody:** FXYD7 is a member of a family of small membrane proteins that share a 35-amino acid signature sequence domain, beginning with the sequence PFXYD and containing seven invariant and six highly conserved amino acids. The FXYD proteins are tissue-specific regulators of Na, K-ATPase, with FXYD7 initially identified as a brain-specific member. FXYD7 interacts with Na, K-ATPase through its transmembrane domain and is thought to influence the affinity of Na, K-ATPase for external K<sup>+</sup> and Na<sup>+</sup> ions. Other members of the FXDY family have similar functions: FXYD2 regulates the properties of Na, K-ATPase, while FXYD1 (phospholemman), FXYD3 (MAT-8), FXYD4 (CHIF), and FXYD5 (RIC) have been shown to induce channel activity in experimental expression systems.

### **FXYD7 Antibody - References**

Beguín P, Crambert G, Monnet-Tschudi F, et al. FXYD7 is a brain-specific regulator of Na,K-ATPase  $\alpha$ 1- $\beta$  isozymes. *EMBO J.* 2002; 21:3264-73  
Crambert G and Geering K. FXYD proteins: new tissue-specific regulators of the ubiquitous Na,K-ATPase. *Sci. STKE* 2003; 2003 (166):RE1.  
Li C, Crambert G, Thuillard D, et al. role of the transmembrane domain of FXDY7 in structural and functional interactions with Na,K-ATPase. *J. Biol. Chem.* 2005; 280:42738-43.