

## FXYD6 (S-12): sc-55821

### BACKGROUND

The mammalian FXYD family maintains Na<sup>+</sup> and K<sup>+</sup> gradients between the intracellular and extracellular milieus of cells in processes such as renal Na<sup>+</sup>-reabsorption, muscle contraction and neuronal excitability. FXYDs are single-span membrane proteins that share a 35 amino acid signature domain, beginning with the sequence PFXDYD and containing 7 invariant and 6 conserved amino acids. Members of the FXYD family include FXYD1 (PLM, phospholemman), FXYD2 (the  $\gamma$  subunit of the Na<sup>+</sup>/K<sup>+</sup>-ATPase), FXYD3 (Mat8, mammary tumor protein), FXYD4 (CHIF) and FXYD5 (RIC). FXYD6 is expressed in various epithelial cells bordering the endolymph space and in the auditory neurons. FXYD6 co-localizes with Na<sup>+</sup>/K<sup>+</sup>-ATPase in the stria vascularis and can be co-immunoprecipitated with Na<sup>+</sup>/K<sup>+</sup>-ATPase. After expression, FXYD6 associates with Na<sup>+</sup>/K<sup>+</sup>-ATPase  $\alpha$ 1- $\beta$ 1 and  $\alpha$ 1- $\beta$ 2 isozymes, which are preferentially expressed in different regions of the inner ear and also with gastric and non-gastric H<sup>+</sup>/K<sup>+</sup>-ATPase.

### REFERENCES

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3. Kadowaki, K., et al. 2004. Phosphohippolin expression in the rat central nervous system. *Brain Res. Mol. Brain Res.* 125: 105-112.
4. Mulligan, M.K., et al. 2006. Toward understanding the genetics of alcohol drinking through transcriptome meta-analysis. *Proc. Natl. Acad. Sci. USA* 103: 6368-6373.
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7. Delprat, B., et al. 2007. FXYD6 is a novel regulator of Na,K-ATPase expressed in the inner ear. *J. Biol. Chem.* 282: 7450-7456.

### CHROMOSOMAL LOCATION

Genetic locus: FXYD6 (human) mapping to 11q23.3.

### SOURCE

FXYD6 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of FXYD6 of human origin.

### PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-55821 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

FXYD6 (S-12) is recommended for detection of FXYD6 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for FXYD6 siRNA (h): sc-62360, FXYD6 shRNA Plasmid (h): sc-62360-SH and FXYD6 shRNA (h) Lentiviral Particles: sc-62360-V.

Molecular Weight of FXYD6: 11 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

### STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **FXYD6 (E-11): sc-398465**, our highly recommended monoclonal alternative to FXYD6 (S-12).