SANTA CRUZ BIOTECHNOLOGY, INC.

FXYD6 (M-18): sc-55820

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The mammalian FXYD family maintains Na^+ and K^+ gradients between the intracellular and extracellular milieus of cells in processes such as renal Na^+-reabsorption, muscle contraction and neuronal excitability. FXYDs are single-span membrane proteins that share a 35 amino acid signature domain, beginning with the sequence PFXYD and containing 7 invariant and 6 conserved amino acids. Members of the FXYD family include FXYD1 (PLM, phospholemman), FXYD2 (the γ subunit of the Na^+/K^+-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^+/K^+-ATPase in the stria vascularis and can be co-immunoprecipitated with Na^+/K^+-ATPase. After expression, FXYD6 associates with Na^+/K^+-ATPase α1-β1 and α1-β2 isozymes, which are preferentially expressed in different regions of the inner ear and also with gastric and non-gastric H^+/K^+-ATPase.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Fxyd6 (mouse) mapping to 9 A5.2.

SOURCE

FXYD6 (M-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of FXYD6 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-55820 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FXYD6 (M-18) is recommended for detection of FXYD6 of mouse and rat 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).

FXYD6 (M-18) is also recommended for detection of FXYD6 in additional species, including equine, bovine and avian.

Suitable for use as control antibody for FXYD6 siRNA (m): sc-62361, FXYD6 shRNA Plasmid (m): sc-62361-SH and FXYD6 shRNA (m) Lentiviral Particles: sc-62361-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™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ 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™ 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 or our catalog for detailed protocols and support products.