

FXYD3 (M-88): sc-67246

BACKGROUND

The mammalian FXYD family maintains Na⁺ and K⁺ gradients between the intracellular and extracellular milieu 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 seven invariant and six 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). FXYD3, a 67 amino acid protein, may act as a chloride channel or as a chloride channel regulator. It is expressed in a subset of human breast tumors and shows partial homology to FXYD1. FXYD3 has a putative 20 amino acid leader sequence and a putative transmembrane domain (with two cysteine residues). It contains no consensus phosphorylation sites in the cytoplasmic domain.

REFERENCES

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- Arimochi, J., Kobayashi, A. and Maeda, M. 2005. Stable expression and visualization of Mat-8 (FXYD-3) tagged with a fluorescent protein in Chinese hamster ovary (CHO)-K1 cells. *Biotechnol. Lett.* 27: 1017-1024.

CHROMOSOMAL LOCATION

Genetic locus: St3gal5 (mouse) mapping to 6 C1.

SOURCE

FXYD3 (M-88) is a rabbit polyclonal antibody raised against amino acids 1-88 representing full length FXYD3 of mouse origin.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

GM3 Synthase (M-140) is recommended for detection of GM3 Synthase of mouse and, to a lesser extent, rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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 GM3 Synthase siRNA (m): sc-72298, GM3 Synthase shRNA Plasmid (m): sc-72298-SH and GM3 Synthase shRNA (m) Lentiviral Particles: sc-72298-V.

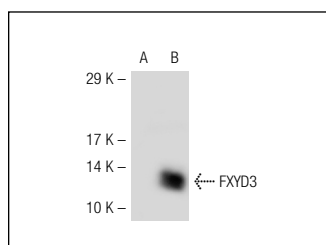
Molecular Weight of FXYD3: 8 kDa.

Positive Controls: FXYD3 (m): 293T Lysate: sc-126876.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



FXYD3 (M-88): sc-67246. Western blot analysis of FXYD3 expression in non-transfected: sc-117752 (A) and mouse FXYD3 transfected: sc-126876 (B) 293T whole cell lysates.

STORAGE

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

MONOS
Satisfaction
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Try **FXYD3 (B-3): sc-393639** or **FXYD3 (A-8): sc-271808**, our highly recommended monoclonal alternatives to FXYD3 (M-88).