

FXYD5 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14909c

Specification

FXYD5 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB, IHC-P,E <u>O96DB9</u> NP_001158077.1, NP_659003.1 Human Rabbit Polyclonal Rabbit IgG 19472 71-100

FXYD5 Antibody (Center) - Additional Information

Gene ID 53827

Other Names FXYD domain-containing ion transport regulator 5, Dysadherin, FXYD5, DYSAD, IWU1

Target/Specificity This FXYD5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 71-100 amino acids from the Central region of human FXYD5.

Dilution WB~~1:1000 IHC-P~~1:10~50

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

FXYD5 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

FXYD5 Antibody (Center) - Protein Information

Name FXYD5

Synonyms DYSAD, IWU1



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 (By similarity). May increase NKA activity by increasing the apparent affinity for Na(+) (PubMed:<u>18263667</u>). Involved in down-regulation of E-cadherin which results in reduced cell adhesion. Promotes metastasis (PubMed:<u>11756660</u>).

Cellular Location

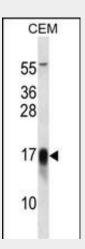
Cell membrane; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P97808} Basolateral cell membrane {ECO:0000250|UniProtKB:P97808}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P97808}. Note=In kidneys localizes to the basolateral membrane of the connecting tubule {ECO:0000250|UniProtKB:P97808}

FXYD5 Antibody (Center) - Protocols

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

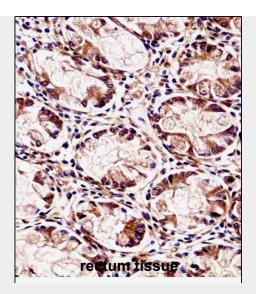
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

FXYD5 Antibody (Center) - Images



FXYD5 Antibody (Center) (Cat. #AP14909c) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the FXYD5 antibody detected the FXYD5 protein (arrow).





FXYD5 Antibody (Center) (AP14909c)immunohistochemistry analysis in formalin fixed and paraffin embedded human rectum tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of FXYD5 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

FXYD5 Antibody (Center) - Background

This gene encodes 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 7 invariant and 6 highly conserved amino acids. The approved human gene nomenclature for the family is FXYD-domain containing ion transport regulator. Mouse FXYD5 has been termed RIC (Related to Ion Channel). FXYD2, also known as the gamma subunit of the Na,K-ATPase, regulates the properties of that enzyme. FXYD1 (phospholemman), FXYD2 (gamma), FXYD3 (MAT-8), FXYD4 (CHIF), and FXYD5 (RIC) have been shown to induce channel activity in experimental expression systems. Transmembrane topology has been established for two family members (FXYD1 and FXYD2), with the N-terminus extracellular and the C-terminus on the cytoplasmic side of the membrane. This gene product, FXYD5, is a glycoprotein that functions in the up-regulation of chemokine production, and it is involved in the reduction of cell adhesion via its ability to down-regulate E-cadherin. It also promotes metastasis, and has been linked to a variety of cancers. Alternative splicing results in multiple transcript variants. [RefSeg curation by Kathleen J. Sweadner, Ph.D., sweadner@helix.mgh.harvard.edu.].

FXYD5 Antibody (Center) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Ono, K., et al. Anticancer Res. 30(9):3273-3278(2010) Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Liang, J.F., et al. Pathol. Res. Pract. 205(7):445-450(2009) Batistatou, A., et al. Endocr. Pathol. 19(3):197-202(2008)