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FXYD6 Rabbit pAb

Catalog # AP99988

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q9H0Q3
Other Accession	Q9H0Q3
Predicted	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	10542
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human FXYD6
Epitope Specificity	15-75/95
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the FXYD family.
DISEASE	Genetic variations in FXYD6 are associated with susceptibility to schizophrenia type 2 (SCZD2) [MIM:603342]. A complex, multifactorial psychotic disorder or group of disorders characterized by disturbances in the form and content of thought (e.g. delusions, hallucinations), in mood (e.g. inappropriate affect), in sense of self and relationship to the external world (e.g. loss of ego boundaries, withdrawal), and in behavior (e.g bizarre or apparently purposeless behavior). Although it affects emotions, it is distinguished from mood disorders in which such disturbances are primary. Similarly, there may be mild impairment of cognitive function, and it is distinguished from the dementias in which disturbed cognitive function is considered primary. Some patients manifest schizophrenic as well as bipolar disorder symptoms and are often given the diagnosis of schizoaffective disorder.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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 seven invariant and six conserved amino acids. Members of the FXYD family include FXYD1 (PLM, phospholemman), FXYD2 (the g 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 alpha1-beta1 and alpha1-beta2 isozymes, which are preferentially expressed in different regions of the inner ear and also with gastric and non-gastric H+/K+-ATPase.

Additional Information

Gene ID	53826
Other Names	0610030I18Rik; Php; FXYD6_HUMAN; FXYD6; Phosphohippolin; FXYD6_MOUSE; PLM-like protein; Plp; FXYD6_RAT; Vascular endothelial cell-specific protein 6 (VESP6); FXYD domain containing ion transport regulator 6; FXYD domain-containing ion transport regulator 6
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	FXYD6 (HGNC:4030)
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. Reduces the apparent affinity for intracellular Na(+) with no change in the apparent affinity for extracellular K(+) (PubMed:33231612). In addition to modulating NKA kinetics, may also function as a regulator of NKA localization to the plasma membrane (By similarity).
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:Q91XV6}; Single-pass type I membrane protein

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