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Phospho-TJP2(S978) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3790a

Product Information

Application	DB, E
Primary Accession	Q9UDY2
Other Accession	NP_001164101.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB41329
Calculated MW	133958

Additional Information

Gene ID	9414
Other Names	Tight junction protein ZO-2, Tight junction protein 2, Zona occludens protein 2, Zonula occludens protein 2, TJP2, X104, ZO2
Target/Specificity	This TJP2 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S978 of human TJP2.
Dilution	DB~~1:500 E~~Use at an assay dependent concentration.
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	Phospho-TJP2(S978) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TJP2 (HGNC:11828)
Function	Plays a role in tight junctions and adherens junctions (By similarity). Acts as a positive regulator of RANKL-induced osteoclast differentiation, potentially via mediating downstream transcriptional activity (By similarity).

Cellular Location	Cell junction, adherens junction {ECO:0000250|UniProtKB:Q9Z0U1}. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell junction, tight junction {ECO:0000250|UniProtKB:Q9Z0U1}. Nucleus. Note=Also nuclear under environmental stress conditions and in migratory endothelial cells and subconfluent epithelial cell cultures. Localizes to tight junctions during initial stages of their formation (By similarity). {ECO:0000250, ECO:0000250|UniProtKB:Q95168}
Tissue Location	This protein is found in epithelial cell junctions. Isoform A1 is abundant in the heart and brain. Detected in brain and skeletal muscle. It is present almost exclusively in normal tissues Isoform C1 is expressed at high level in the kidney, pancreas, heart and placenta. Not detected in brain and skeletal muscle. Found in normal as well as in most neoplastic tissues

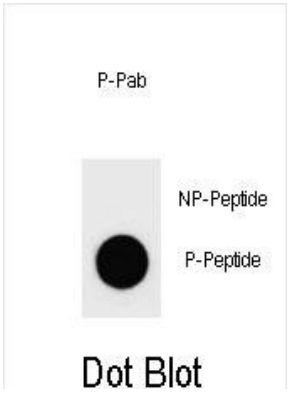
Background

This gene encodes a zonula occluden that is a member of the membrane-associated guanylate kinase homolog family. The encoded protein functions as a component of the tight junction barrier in epithelial and endothelial cells and is necessary for proper assembly of tight junctions. Mutation in this gene have been identified in patients with hypercholanemia. Alternate splicing results in multiple transcript variants.

References

Lechuga, S., et al. Exp. Cell Res. 316(19):3124-3139(2010)
Remue, E., et al. FEBS Lett. 584(19):4175-4180(2010)
Walsh, T., et al. Am. J. Hum. Genet. 87(1):101-109(2010)
Meerschaert, K., et al. Cell. Mol. Life Sci. 66(24):3951-3966(2009)
Fanning, A.S., et al. Ann. N. Y. Acad. Sci. 1165, 113-120 (2009) :

Images



Dot blot analysis of Phospho-TJP2-S978 Antibody Phospho-specific Pab (Cat. #AP3790a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.6ug per ml.