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PDZD3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17639c

Product Information

Application	WB, E
Primary Accession	Q86UT5
Other Accession	NP_001161940.1, NP_079067.3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB37960
Calculated MW	61032
Antigen Region	258-285

Additional Information

Gene ID	79849
Other Names	Na(+)/H(+) exchange regulatory cofactor NHE-RF4, NHERF-4, Intestinal and kidney-enriched PDZ protein, Natrium-phosphate cotransporter IIa C-terminal-associated protein 2, Na/Pi cotransporter C-terminal-associated protein 2, NaPi-Cap2, PDZ domain-containing protein 2, PDZ domain-containing protein 3, Sodium-hydrogen exchanger regulatory factor 4, PDZD3, IKEPP, NHERF4, PDZK2
Target/Specificity	This PDZD3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 258-285 amino acids from the Central region of human PDZD3.
Dilution	WB~~1:1000 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	PDZD3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NHERF4

Synonyms	IKEPP, PDZD3, PDZK2
Function	Acts as a regulatory protein that associates with GUCY2C and negatively modulates its heat-stable enterotoxin-mediated activation (PubMed:11950846). Stimulates SLC9A3 activity in the presence of elevated calcium ions (PubMed:19088451).
Cellular Location	Cell membrane; Peripheral membrane protein. Cytoplasm Note=Preferentially accumulates at the apical surface and ileal brush border of intestinal epithelial cells (PubMed:11950846, PubMed:19088451).
Tissue Location	Expressed in kidney and the gastrointestinal tract. Not detected in brain, heart, skeletal muscle or cells of hematopoietic origin.

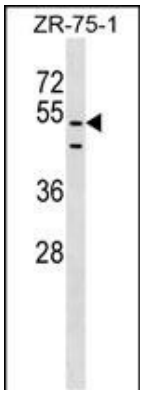
Background

Guanylyl cyclase C (GCC, or GUCY2C; MIM 601330) produces cGMP following the binding of either endogenous ligands or heat-stable enterotoxins secreted by E. coli and other enteric bacteria. Activation of GCC initiates a signaling cascade that leads to phosphorylation of the cystic fibrosis transmembrane conductance regulator (CFTR; MIM 602421), followed by a net efflux of ions and water into the intestinal lumen. IKEPP is a regulatory protein that associates with GCC and regulates the amount of cGMP produced following receptor stimulation (Scott et al., 2002 [PubMed 11950846]).

References

Zachos, N.C., et al. Cell. Physiol. Biochem. 22 (5-6), 693-704 (2008) :
Kato, Y., et al. Mol. Pharmacol. 67(3):734-743(2005)
Hegedus, T., et al. Biochem. Biophys. Res. Commun. 302(3):454-461(2003)
Scott, R.O., et al. J. Biol. Chem. 277(25):22934-22941(2002)

Images



PDZD3 Antibody (Center) (Cat. #AP17639c) western blot analysis in ZR-75-1 cell line lysates (35ug/lane).This demonstrates the PDZD3 antibody detected the PDZD3 protein (arrow).