

**PDZD3 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP17639c****Specification**

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**PDZD3 Antibody (Center) Blocking Peptide - Product Information**Primary Accession [Q86UT5](#)**PDZD3 Antibody (Center) Blocking Peptide - 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 Ila 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

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**PDZD3 Antibody (Center) Blocking Peptide - 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:<a href="http://www.uniprot.org/citations/11950846" target="\_blank">11950846</a>). Stimulates SLC9A3 activity in the presence of elevated calcium ions (PubMed:<a href="http://www.uniprot.org/citations/19088451" target="\_blank">19088451</a>).

**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.

### **PDZD3 Antibody (Center) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **PDZD3 Antibody (Center) Blocking Peptide - Images**

### **PDZD3 Antibody (Center) Blocking Peptide - 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]).

### **PDZD3 Antibody (Center) Blocking Peptide - 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)