

TRPV6 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16018b

Product Information

Application	WB, E
Primary Accession	<u>Q9H1D0</u>
Other Accession	<u>NP_061116.2</u>
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34571
Calculated MW	87286
Antigen Region	617-646

Additional Information

Gene ID	55503
Other Names	Transient receptor potential cation channel subfamily V member 6, TrpV6, CaT-like, CaT-L, Calcium transport protein 1, CaT1, Epithelial calcium channel 2, ECaC2, TRPV6, ECAC2
Target/Specificity	This TRPV6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 617-646 amino acids from the C-terminal region of human TRPV6.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	TRPV6 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TRPV6
Synonyms	ECAC2

Function	Calcium selective cation channel that mediates Ca(2+) uptake in various tissues, including the intestine (PubMed: <u>11097838</u> , PubMed: <u>11248124</u> , PubMed: <u>11278579</u> , PubMed: <u>15184369</u> , PubMed: <u>23612980</u> , PubMed: <u>29258289</u>). Important for normal Ca(2+) ion homeostasis in the body, including bone and skin (By similarity). The channel is activated by low internal calcium level, probably including intracellular calcium store depletion, and the current exhibits an inward rectification (PubMed: <u>15184369</u>). Inactivation includes both a rapid Ca(2+)-dependent and a slower Ca(2+)-calmodulin-dependent mechanism; the latter may be regulated by phosphorylation. In vitro, is slowly inhibited by Mg(2+) in a voltage-independent manner. Heteromeric assembly with TRPV5 seems to modify channel properties. TRPV5-TRPV6 heteromultimeric concatemers exhibit voltage-dependent gating.
Cellular Location	Cell membrane; Multi-pass membrane protein
Tissue Location	Expressed at high levels in the gastrointestinal tract, including esophagus, stomach, duodenum, jejunum, ileum and colon, and in pancreas, placenta, prostate and salivary gland Expressed at moderate levels in liver, kidney and testis. Expressed in trophoblasts of placenta villus trees (at protein level) (PubMed:23612980). Expressed in locally advanced prostate cancer, metastatic and androgen-insensitive prostatic lesions but not detected in healthy prostate tissue and benign prostatic hyperplasia

Background

Calcium-permeable channels, such as TRPV6, participate in neurotransmission, muscle contraction, and exocytosis by providing calcium as an intracellular second messenger. Depending on the tissue, transcellular calcium transport may be regulated by vitamin D, parathyroid hormone (PTH; MIM 168450), or calcitonin (CALCA; MIM 114130).

References

Zhao, X.Z., et al. Zhonghua Nan Ke Xue 16(5):423-427(2010) Sopjani, M., et al. J. Membr. Biol. 233 (1-3), 35-41 (2010) : Van Haute, C., et al. ScientificWorldJournal 10, 1597-1611 (2010) : Kennedy, B.G., et al. Mol. Vis. 16, 665-675 (2010) : Kessler, T., et al. BMC Cancer 9, 380 (2009) :

Images



All lanes : Anti-TRPV6 Antibody (C-term) at 1:1000 dilution Lane 1: LNCap whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 87kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.