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TRPV6 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20671c

Product Information

Application	WB, E
Primary Accession	Q9H1D0
Reactivity	Human
Predicted	Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB50088
Calculated MW	87286

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 a rabbit immunized with a KLH conjugated synthetic peptide between 352-385 amino acids from the Central 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 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	TRPV6 Antibody (Center) 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:11097838, PubMed:11248124, PubMed:11278579, PubMed:15184369, PubMed:23612980, PubMed:29258289). 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:15184369). 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

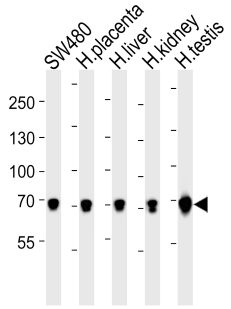
Background

Calcium selective cation channel probably involved in Ca(2+) uptake in various tissues, including Ca(2+) reabsorption in intestine. The channel is activated by low internal calcium level, probably including intracellular calcium store depletion, and the current exhibits an inward rectification. 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 (By similarity).

References

Peng J.-B.,et al.Biochem. Biophys. Res. Commun. 278:326-332(2000).
Wood R.J.,et al.BMC Physiol. 1:11-11(2001).
Peng J.-B.,et al.Genomics 76:99-109(2001).
Wissenbach U.,et al.J. Biol. Chem. 276:19461-19468(2001).
Peng J.-B.,et al.Submitted (MAR-2001) to the EMBL/GenBank/DDBJ databases.

Images



Western blot analysis of lysates from SW480 cell line, human placenta, huamn liver, kidney and testis tissue lysate(from left to right), using TRPV6 Antibody (Center)(Cat. #AP20671c). AP20671c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

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