

TRPV5 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16764B

Specification

TRPV5 Antibody (C-term) - Product Information

Application WB,E **Primary Accession** O9NOA5 NP 062815.2 Other Accession Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 82562 Antigen Region 634-663

TRPV5 Antibody (C-term) - Additional Information

Gene ID 56302

Other Names

Transient receptor potential cation channel subfamily V member 5, TrpV5, Calcium transport protein 2, CaT2, Epithelial calcium channel 1, ECaC, ECaC1, Osm-9-like TRP channel 3, OTRPC3, TRPV5, ECAC1

Target/Specificity

This TRPV5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 634-663 amino acids from the C-terminal region of human TRPV5.

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

TRPV5 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

TRPV5 Antibody (C-term) - Protein Information

Name TRPV5



Synonyms ECAC1 {ECO:0000303|PubMed:10945469}

Function Constitutively active calcium selective cation channel thought to be involved in Ca(2+) reabsorption in kidney and intestine (PubMed:11549322, PubMed:18768590). Required for normal Ca(2+) reabsorption in the kidney distal convoluted tubules (By similarity). The channel is activated by low internal calcium level and the current exhibits an inward rectification (PubMed:11549322, PubMed:18768590). A Ca(2+)-dependent feedback regulation includes fast channel inactivation and slow current decay (By similarity). Heteromeric assembly with TRPV6 seems to modify channel properties. TRPV5-TRPV6 heteromultimeric concatemers exhibit voltage-dependent gating (By similarity).

Cellular Location

Apical cell membrane; Multi-pass membrane protein. Note=Colocalized with S100A10 and ANAX2 along the apical domain of kidney distal tubular cells (By similarity) The expression of the glycosylated form in the cell membrane is increased in the presence of WNK3 (PubMed:18768590) {ECO:0000250|UniProtKB:P69744, ECO:0000269|PubMed:18768590}

Tissue Location

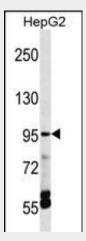
Expressed at high levels in kidney, small intestine and pancreas, and at lower levels in testis, prostate, placenta, brain, colon and rectum.

TRPV5 Antibody (C-term) - Protocols

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

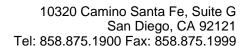
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

TRPV5 Antibody (C-term) - Images



TRPV5 Antibody (C-term) (Cat. #AP16764b) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the TRPV5 antibody detected the TRPV5 protein (arrow).

TRPV5 Antibody (C-term) - Background





This gene is a member of the transient receptor family and the TrpV subfamily. The calcium-selective channel encoded by this gene has 6 transmembrane-spanning domains, multiple potential phosphorylation sites, an N-linked glycosylation site, and 5 ANK repeats. This protein forms homotetramers or heterotetramers and is activated by a low internal calcium level.

TRPV5 Antibody (C-term) - References

Chamoux, E., et al. J. Biol. Chem. 285(33):25354-25362(2010) Kennedy, B.G., et al. Mol. Vis. 16, 665-675 (2010) : Yerges, L.M., et al. J. Bone Miner. Res. 24(12):2039-2049(2009) de Groot, T., et al. J. Am. Soc. Nephrol. 20(8):1693-1704(2009) Semenova, S.B., et al. Am. J. Physiol., Cell Physiol. 296 (5), C1098-C1104 (2009) :