

# TRPV5 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP16764b

## **Specification**

## TRPV5 Antibody (C-term) Blocking Peptide - Product Information

**Primary Accession** 

Q9NQA5

# TRPV5 Antibody (C-term) Blocking Peptide - 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

#### **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.

# TRPV5 Antibody (C-term) Blocking Peptide - 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:<a

href="http://www.uniprot.org/citations/11549322" target="\_blank">11549322</a>, PubMed:<a href="http://www.uniprot.org/citations/18768590" target="\_blank">18768590</a>). 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:<a href="http://www.uniprot.org/citations/11549322" target="\_blank">11549322</a>, PubMed:<a href="http://www.uniprot.org/citations/18768590" target="\_blank">18768590</a>). 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) Blocking Peptide - Protocols

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

### Blocking Peptides

TRPV5 Antibody (C-term) Blocking Peptide - Images

# TRPV5 Antibody (C-term) Blocking Peptide - Background

This gene is a member of the transient receptor family and the TrpV subfamily. The calcium-selective channel encoded by thisgene 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 isactivated by a low internal calcium level.

### TRPV5 Antibody (C-term) Blocking Peptide - 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) :