10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TRPV6 Blocking Peptide (Center)

Synthetic peptide
Catalog # BP20671c

Specification

TRPV6 Blocking Peptide (Center) - Product Information

Primary Accession Q9H1D0

TRPV6 Blocking Peptide (Center) - 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
The synthetic peptide sequence is selected from aa 352-365 of HUMAN TRPV6

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.

TRPV6 Blocking Peptide (Center) - 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:11278579, PubMed:11248124, 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

TRPV6 Blocking Peptide (Center) - Protocols

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

- Blocking Peptides

TRPV6 Blocking Peptide (Center) - Images

TRPV6 Blocking Peptide (Center) - 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).

TRPV6 Blocking Peptide (Center) - References

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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.