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Goat Anti-TRPV5 Antibody

Peptide-affinity purified goat antibody
Catalog # AF2119a

Specification

Goat Anti-TRPV5 Antibody - Product Information

Application	**WB, IF, ICC, E**
Primary Accession	Q9NQA5
Other Accession	NP_062815, 56302
Reactivity	**Human**
Predicted	**Mouse, Rat, Pig, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**82562**

Goat Anti-TRPV5 Antibody - 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

Dilution
WB~~1:1000
IF~~1:50~200
ICC~~N/A
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-TRPV5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-TRPV5 Antibody - 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.

Goat Anti-TRPV5 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-TRPV5 Antibody - Images

AF2119a (1 µg/ml) staining of Human Pancreas lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

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Goat Anti-TRPV5 Antibody - 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.

Goat Anti-TRPV5 Antibody - References

TRPV-5 mediates a receptor activator of NF-kappaB (RANK) ligand-induced increase in cytosolic Ca2+ in human osteoclasts and down-regulates bone resorption. Chamoux E, et al. J Biol Chem, 2010 Aug 13. PMID 20547482.
Expression of transient receptor potential vanilloid channels TRPV5 and TRPV6 in retinal pigment epithelium. Kennedy BG, et al. Mol Vis, 2010 Apr 14. PMID 20405023.
High-density association study of 383 candidate genes for volumetric BMD at the femoral neck and lumbar spine among older men. Yerges LM, et al. J Bone Miner Res, 2009 Dec. PMID 19453261.
Parathyroid hormone activates TRPV5 via PKA-dependent phosphorylation. de Groot T, et al. J Am Soc Nephrol, 2009 Aug. PMID 19423690.
Endogenous expression of TRPV5 and TRPV6 calcium channels in human leukemia K562 cells. Semenova SB, et al. Am J Physiol Cell Physiol, 2009 May. PMID 19295174.