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Anti-TRPV5 Picoband Antibody

Catalog # ABO12205

Specification

Anti-TRPV5 Picoband Antibody - Product Information

Application	**WB**
Primary Accession	Q9NQA5
Host	**Rabbit**
Reactivity	**Human, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Transient receptor potential cation channel subfamily V member 5(TRPV5) detection. Tested with WB in Human;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-TRPV5 Picoband 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

Calculated MW
82551 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human, Rat

Subcellular Localization
Apical cell membrane ; Multi-pass membrane protein . 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. .

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

Protein Name
Transient receptor potential cation channel subfamily V member 5

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human TRPV5 (580-610aa DTHWRVAQERDELWRAQVVATTVMLERKLPR), different from the related mouse and rat sequences by one amino acid.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Sequence Similarities
Belongs to the transient receptor (TC 1.A.4) family. TrpV subfamily. TRPV5 sub-subfamily.

Anti-TRPV5 Picoband 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.

Anti-TRPV5 Picoband Antibody - Protocols

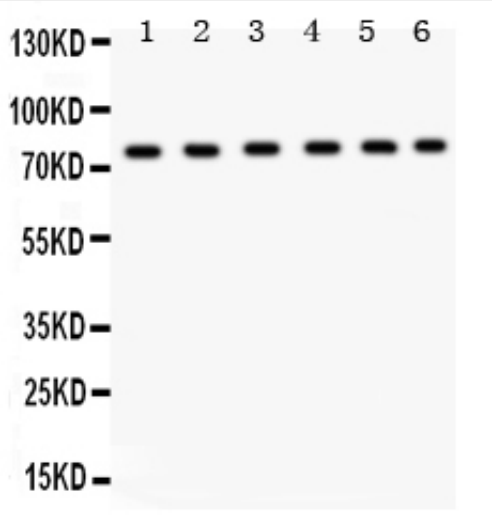
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

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- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-TRPV5 Picoband Antibody - Images



Anti- TRPV5 Picoband antibody, ABO12205, Western blottingAll lanes: Anti TRPV5 (ABO12205) at 0.5ug/mlLane 1: Rat Pancreas Tissue Lysate at 50ugLane 2: Rat Lung Tissue Lysate at 50ugLane 3: Rat Intestine Tissue Lysate at 50ugLane 4: SW620 Whole Cell Lysate at 40ugLane 5: COLO320 Whole Cell Lysate at 40ugLane 6: 293T Whole Cell Lysate at 40ugPredicted bind size: 83KDObserved bind size: 83KD

Anti-TRPV5 Picoband Antibody - Background

Transient receptor potential cation channel subfamily V member 5 is a protein that in humans is encoded by the TRPV5 gene. 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. And this protein forms homotetramers or heterotetramers and is activated by a low internal calcium level. In addition, TRPV5 is mainly expressed in kidney epithelial cells, where it plays an important role in the reabsorption of Ca2+. Genetic deletion of TRPV5 in mice leads to Ca2+ loss in the urine, and consequential hyperparathyroidism, and bone loss.