

**Anti-TRPV5 Picoband Antibody**  
**Catalog # ABO12205****Specification**

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**Anti-TRPV5 Picoband Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q9NQA5</a>
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.<br> <br>

**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<br>

**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 DTHWRVAQERDELWRAQVVATTVMLEKRLPR), 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 reconstitution, 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:<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.

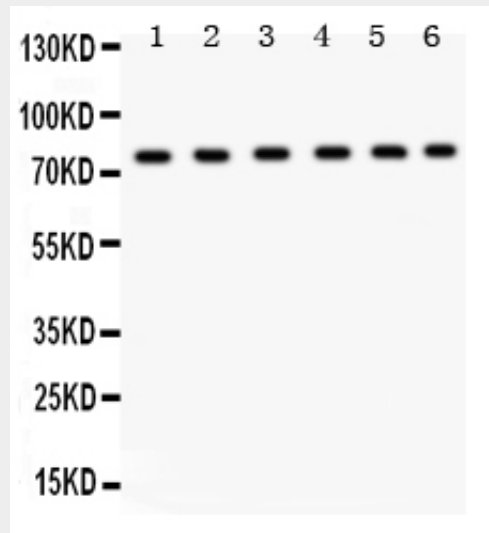
**Anti-TRPV5 Picoband Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-TRPV5 Picoband Antibody - Images



Anti- TRPV5 Picoband antibody, ABO12205, Western blotting All lanes: Anti TRPV5 (ABO12205) at 0.5ug/ml  
Lane 1: Rat Pancreas Tissue Lysate at 50ug  
Lane 2: Rat Lung Tissue Lysate at 50ug  
Lane 3: Rat Intestine Tissue Lysate at 50ug  
Lane 4: SW620 Whole Cell Lysate at 40ug  
Lane 5: COLO320 Whole Cell Lysate at 40ug  
Lane 6: 293T Whole Cell Lysate at 40ug  
Predicted bind size: 83KD  
Observed 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  $\text{Ca}^{2+}$ . Genetic deletion of TRPV5 in mice leads to  $\text{Ca}^{2+}$  loss in the urine, and consequential hyperparathyroidism, and bone loss.