

## Product datasheet for **TA328743**

### TRPV5 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)GLNLSEGDGEEVYHF, corresponding to amino acid residues 715-729 of human TRPV5. Intracellular, C-terminus.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN <sub>3</sub> .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	transient receptor potential cation channel subfamily V member 5
Database Link:	<a href="#">NP_062815</a> <a href="#">Entrez Gene 116469 Rat</a> <a href="#">Entrez Gene 194352 Mouse</a> <a href="#">Entrez Gene 56302 Human</a> <a href="#">Q9NQA5</a>



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**Background:**

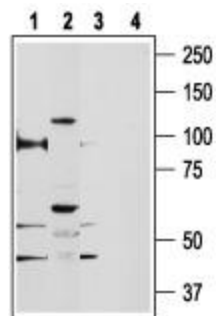
TRP channels are a large family (about 28 genes) of plasma membrane, non-selective cationic channels that are either specifically or ubiquitously expressed in excitable and non-excitable cells. According to IUPHAR the TRP family comprises of three main subfamilies on the basis of sequence homology; TRPC, TRPM and TRPV (to date, three extra subfamilies are considered to belong to the TRP family; the TRPA, TRPML, and TRPP). The TRPV subfamily consists of six members, TRPV1-6. TRPV5 (ECaC) and TRPV6 (CaT1) are unique members of the TRP family. Both are epithelial Ca<sup>2+</sup> channels, form constitutively open channels, share high degree of homology (about 66%) with differences in the N and C-terminus. TRPV6 and TRPV5 are expressed in a 1,25-dihydroxyvitamin D<sub>3</sub> dependent manner. In contrast to other members of the TRP family, TRPV5 and TRPV6 are highly Ca<sup>2+</sup> selective and are expressed in Ca<sup>2+</sup> transporting epithelia where they are assumed to have an important role in Ca<sup>2+</sup> reabsorption. TRPV5 is preferentially expressed in kidney.

**Synonyms:**

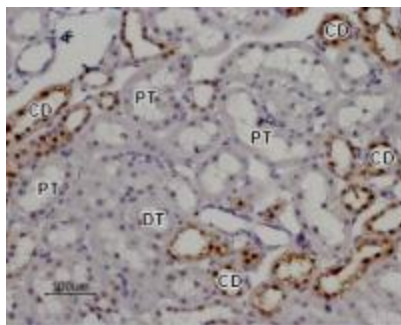
CAT2; ECAC1; OTRPC3

**Protein Families:**

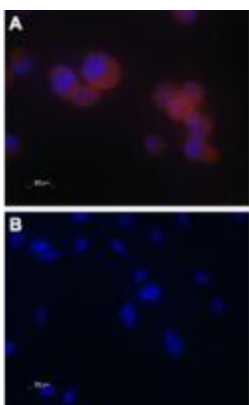
Druggable Genome, Ion Channels: Transient receptor potential, Transmembrane

**Product images:**

Western blot analysis of rat kidney (lanes 1 and 3) and PC3 cell line (lanes 2 and 4) lysates: 1, 2. Anti-TRPV5 antibody, (1:200). 3, 4. Anti-TRPV5 antibody, preincubated with the control peptide antigen.



Expression of TRPV5 in rat kidney. Immunohistochemical staining of rat kidney paraffin embedded section using Anti-TRPV5 antibody, (1:100). TRPV5 is expressed in collecting ducts (CD) in the renal cortex. Note that both proximal tubules (PT) and distal tubules (DT) are negative. Hematoxylin is used as the counterstain.



Expression of TRPV5 in PC3 cells. Immunocytochemical staining of paraformaldehyde-fixed PC-3 cells with Anti-TRPV5 antibody, (1:100), followed by goat anti-rabbit-AlexaFluor-555 secondary antibody (A). B. Same as in (A) but pre-treated with TRPV5 peptide antigen (1:20). Hoechst 33342 is used as the counterstain (blue).