



Rabbit Anti-TRPV5 antibody

SL8534R

Product Name:	TRPV5
Chinese Name:	辣椒素受体5抗体
Alias:	Calcium transport protein 2; Calcium transporter 2; CAT 2; CAT2; ECAC 1; ECaC; ECAC1; Epithelial calcium channel 1; Osm 9 like TRP channel 3; Osm-9-like TRP channel 3; OTRPC 3; OTRPC3; Transient receptor potential cation channel subfamily V member 5; TRPV 5; TrpV5; TRPV5 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	83kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TRPV5:201-300/729
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Transient receptor potential (TRP) proteins are cation-sensitive channels that modulate a myriad of cellular functions, including temperature sensation and vasoregulation Transcribed from a gene adjacent to VR-1, the thermal-sensitive, capsaicin-insensitive TRPV3 is expressed at warm temperatures; expression increases in response to noxious

temperatures. Human TRPV3 is expressed in skin, tongue, dorsal root ganglion, trigeminal ganglion, spinal cord and brain. In addition, TRPV3 is co-expressed in dorsal root ganglion neurons with VR-1. TRPV3 associates with VR-1 and may modulate VR-1 activity. The 729 amino acid TRPV5 (ECAC1) protein comprises six transmembrane domains, multiple potential phosphorylation sites, an N-linked glycosylation site and three ankyrin repeat regions. It is abundantly expressed in kidney, jejunum and pancreas, and at lower levels in testis, prostate, placenta, brain, colon and rectum. TRPV5 controls the rate-limiting step of vitamin D3-regulated Ca²⁺ reabsorption in kidney and intestine; the 5'-flanking region of TRPV5 contains four putative vitamin D3-responsive elements.

Function:

Constitutively active calcium selective cation channel thought to be involved in Ca(2+) reabsorption in kidney and intestine. The channel is activated by low internal calcium level and the current exhibits an inward rectification. A Ca(2+)-dependent feedback regulation includes fast channel inactivation and slow current decay. Heteromeric assembly with TRPV6 seems to modify channel properties. TRPV5-TRPV6 heteromultimeric concatemers exhibit voltage-dependent gating.

Subunit:

Homotetramer and probably heterotetramer with TRPV6. Interacts with TRPV6. Interacts with S100A10 and probably with the ANAX2-S100A10 heterotetramer. The interaction with S100A10 is required for the trafficking to the plasma membrane. Interacts with calmodulin. Interacts with BSPRY, which results in its inactivation (By similarity).

Subcellular Location:

Apical cell membrane. 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.

Post-translational modifications:

Glycosylated.

Similarity:

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

Contains 5 ANK repeats.

SWISS:

Q9NQA5

Gene ID:
56302

Database links:

[Entrez Gene: 56302](#)Human

[Entrez Gene: 194352](#)Mouse

[Entrez Gene: 116469](#)Rat

[Olim: 606679](#)Human

[SwissProt: Q9NQA5](#)Human

[SwissProt: P69744](#)Mouse

[SwissProt: Q9JIP0](#)Rat

[Unigene: 283369](#)Human

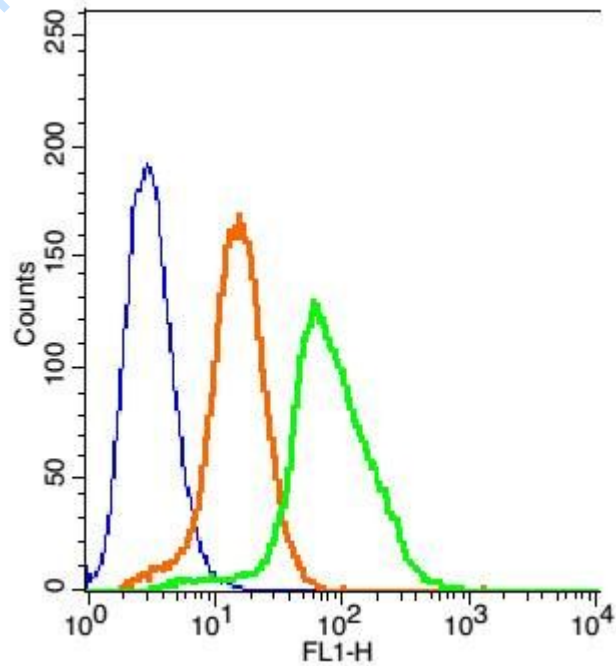
[Unigene: 135734](#)Mouse

[Unigene: 137513](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Blank control(blue): 293T Cells(fixed with 2% paraformaldehyde (10 min)).

Primary Antibody: Rabbit Anti-TRPV5/AF488 Conjugated antibody (SL8534R),

Dilution: 1 μ g in 100 μ L 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG/AF488(orange) ,used under the same conditions.