

Product datasheet for **TA328740**

Trpv1 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)EDAEVFKDSMVPGEK, corresponding to amino acid residues 824-838 of rat TRPV1. 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 ₃ .
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 1
Database Link:	NP 114188 Entrez Gene 7442 Human Entrez Gene 193034 Mouse Entrez Gene 83810 Rat O35433



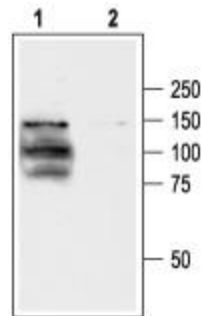
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Background:

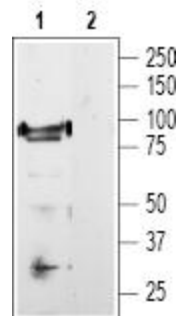
TRPV1 (also named VR1, capsaicin receptor and vanilloid receptor) is a member of the transient receptor potential (TRP) channel family, which includes TRPC, TRPM, TRPA, TRPP, TRPML and the TRPV subfamilies. The TRPV subfamily consists of six members named, TRPV1-6. The TRPV1 channel is a vanilloid gated, nonselective cation channel. The channel has sequence homology to the TRP family, and shares a similar predicted structure of six transmembrane domain (TM) with a pore loop between TM5 and TM6. TRPV1 is expressed predominantly in nociceptors and in sensory neurons. TRPV1 has many activators among them heat, protons, vanilloids like capsaicin, resiniferatoxin (RTX), and lipids. This channel is associated with tissue injury and inflammation. Other members of this family, TRPV2, TRPV3 and TRPV4 also show thermal sensitivity. Conformational changes in the C-terminus are responsible for many functions such as permeation and gating. There is also evidence that deletion of the C-terminus causes a loss of sensitivity to any stimuli. Recent studies demonstrated involvement of TRPV1 in apoptosis where inhibition of the receptor prevented apoptosis.

Synonyms:

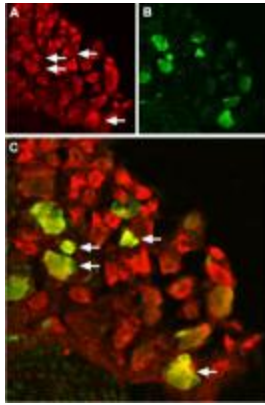
DKFZp434K0220; OTRPC1; VR1

Product images:

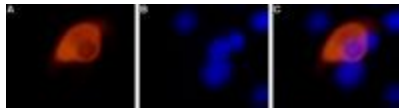
Western blot analysis of TRPV1 transfected HEK-293 cells: 1. Anti-TRPV1 antibody, (1:200). 2. Anti-TRPV1 antibody, preincubated with the control peptide antigen.



Western blot analysis of rat DRG lysate: 1. Anti-TRPV1 antibody, (1:200). 2. Anti-TRPV1 antibody, preincubated with the control peptide antigen.



Expression of TRPV1 in rat DRG. Immunohistochemical staining of rat dorsal root ganglion (DRG) using Anti-TRPV1 antibody. A. TRPV1 (red) in DRG neurons. B. Staining with mouse anti-Parvalbumin (green) in the same DRG section. C. Confocal merge of TRPV1 and Parvalbumin demonstrates colocalization (arrows).



Expression of TRPV1 in rat DRG primary culture. Immunocytochemical staining of paraformaldehyde-fixed and permeabilized rat dorsal root ganglia (DRG) primary cells with Anti-TRPV1 antibody, (1:200). A. Staining followed by goat anti-rabbit-AlexaFluor-555 secondary antibody. B. Nuclear staining using the cell-permeable dye Hoechst 33342. C. Merged image of panels A and B.