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Anti-TRPV1 Antibody
Rabbit polyclonal antibody to TRPV1
Catalog # AP59942

Specification

Anti-TRPV1 Antibody - Product Information

Application	**WB**
Primary Accession	Q8NER1
Other Accession	Q704Y3
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**94956**

Anti-TRPV1 Antibody - Additional Information

Gene ID 7442

Other Names
VR1; Transient receptor potential cation channel subfamily V member 1; TrpV1; Capsaicin receptor; Osm-9-like TRP channel 1; OTRPC1; Vanilloid receptor 1

Target/Specificity
Recognizes endogenous levels of TRPV1 protein.

Dilution
WB~~WB (1/500 - 1/1000)

Format
Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage
Store at -20 °C.Stable for 12 months from date of receipt

Anti-TRPV1 Antibody - Protein Information

Name TRPV1

Synonyms VR1

Function
Non-selective calcium permeant cation channel involved in detection of noxious chemical and thermal stimuli (PubMed:11050376, PubMed:11243859, PubMed:11226139, PubMed:12077606). Seems to mediate proton influx and may be involved in

intracellular acidosis in nociceptive neurons. Involved in mediation of inflammatory pain and hyperalgesia. Sensitized by a phosphatidylinositol second messenger system activated by receptor tyrosine kinases, which involves PKC isozymes and PCL. Activated by vanilloids, like capsaicin, and temperatures higher than 42 degrees Celsius (PubMed:37117175). Upon activation, exhibits a time- and Ca(2+)-dependent outward rectification, followed by a long-lasting refractory state. Mild extracellular acidic pH (6.5) potentiates channel activation by noxious heat and vanilloids, whereas acidic conditions (pH <6) directly activate the channel. Can be activated by endogenous compounds, including 12-hydroperoxytetraenoic acid and bradykinin. Acts as ionotropic endocannabinoid receptor with central neuromodulatory effects. Triggers a form of long-term depression (TRPV1-LTD) mediated by the endocannabinoid anandamine in the hippocampus and nucleus accumbens by affecting AMPA receptors endocytosis.

Cellular Location
Postsynaptic cell membrane {ECO:0000250|UniProtKB:O35433}; Multi-pass membrane protein. Cell projection, dendritic spine membrane {ECO:0000250|UniProtKB:O35433}; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Note=Mostly, but not exclusively expressed in postsynaptic dendritic spines {ECO:0000250|UniProtKB:O35433}

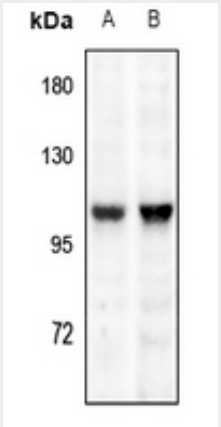
Tissue Location
Widely expressed at low levels. Expression is elevated in dorsal root ganglia. In skin, expressed in cutaneous sensory nerve fibers, mast cells, epidermal keratinocytes, dermal blood vessels, the inner root sheet and the infundibulum of hair follicles, differentiated sebocytes, sweat gland ducts, and the secretory portion of eccrine sweat glands (at protein level)

Anti-TRPV1 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 Cytomety
- Cell Culture

Anti-TRPV1 Antibody - Images



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Western blot analysis of TRPV1 expression in U87MG (A), A375 (B) whole cell lysates.

Anti-TRPV1 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human TRPV1. The exact sequence is proprietary.