# Mouse TrpV3 Monoclonal Antibody | anti-Trpv3 antibody

TrpV3 Antibody: RPE

| CATALOG # | HOST | REACTIVITY | APPLICATIONS |
|---|---|---|---|
| **AAA103386** | **Mouse** | **Human, Mouse, Rat** | **Immunofluorescence, Immunoprecipitation, Immunocytochemistry, Western Blot** |

## PRODUCT SYNONYMS

TrpV3; Monoclonal Antibody; TrpV3 Antibody: RPE; 1110036I10Rik; MGC124324; MGC124325; Transient receptor potential cation channel subfamily V member 3; Trpv3 heat sensitive channel; TRPV3_HUMAN; Vanilloid receptor 3; Vanilloid receptor like 3; Vanilloid receptor-like 3; VRL 3; VRL-3; VRL3; anti-Trpv3 antibody

## PRODUCT SPECIFICATIONS

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| **Host** | Mouse |
| **Reactivity** | Human, Mouse, Rat |
| **Clonality** | Monoclonal |
| **Isotype** | IgG2a |
| **Clone Number** | S15-4 |
| **Form/Format** | Protein G Purified |
| **Concentration** | 1mg/mL (varies by lot) |
| **Sequence Length** | 791 |
| **Applicable Applications for anti-Trpv3 antibody** | IF (Immunofluorescence), IP (Immunoprecipitation), ICC (Immunocytochemistry), WB (Western Blot) |
| **Conjugate** | RPE |
| **Storage Buffer** | PBS pH7.4, 50% glycerol, 0.09% sodium azide |
| **Preparation and Storage** | -20 degree C |

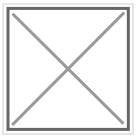
## IMAGES



**IHC (Immunohistochemisry)**
Immunohistochemistry analysis using Mouse Anti-TrpV3 Monoclonal Antibody, Clone S15-4. Tissue: hippocampus. Species: Human. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-TrpV3 Monoclonal Antibody at 1:1000 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT.



**WB (Western Blot)**
Western Blot analysis of Human Cell lysates showing detection of TrpV3 protein using Mouse Anti-TrpV3 Monoclonal Antibody, Clone S15-4. Load: 15 ug. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-TrpV3 Monoclonal Antibody at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.



**IHC (Immunohistochemistry)**
Immunohistochemistry analysis using Mouse Anti-TrpV3 Monoclonal Antibody, Clone S15-4. Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-TrpV3 Monoclonal Antibody at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT.

## ADDITIONAL INFORMATION

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| **Related Product Information for anti-Trpv3 antibody** | **Background Info:** Detects ~70kDa<br><br>**Scientific Background:** Ion channels are integral membrane proteins that help establish and control the small voltage gradient across the plasma membrane of living cells by allowing the flow of ions down their electrochemical gradient (1). They are present in the membranes that surround all biological cells because their main function is to regulate the flow of ions across this membrane. Whereas some ion channels permit the passage of ions based on charge, others conduct based on a ionic species, such as sodium or potassium. Furthermore, in some ion channels, the passage is governed by a gate which is controlled by chemical or electrical signals, temperature, or mechanical forces. There are a few main classifications of gated ion channels. There are voltage- gated ion channels, ligand-gated, other gating systems and finally those that are classified differently, having more exotic characteristics. The first are voltage- gated ion channels which open and close in response to membrane potential. These are then separated into sodium, calcium, potassium, proton, transient receptor, and cyclic nucleotide-gated channels; each of which is responsible for a unique role. Ligand-gated ion channels are also known as ionotropic receptors, and they open in response to specific ligand molecules binding to the extracellular domain of the receptor protein. The other gated classifications include activation and inactivation by second messengers, inward-rectifier potassium channels, calcium-activated potassium channels, two-pore-domain potassium channels, light-gated channels, mechano-sensitive ion channels and cyclic nucleotide-gated channels. Finally, the other classifications are based on less normal characteristics such as two-pore channels, and transient receptor potential channels (2). The TRPV3 protein belongs to a family of nonselective cation channels that function in a variety of processes, including temperature sensation and vasoregulation. The thermosensitive members of this family are expressed in subsets of sensory neurons that terminate in the skin, and are activated at distinct physiological temperatures. This channel is activated at temperatures between 22 and 40 degrees C. The gene lies in close proximity to another family member (TRPV1) gene on chromosome 17, and the two encoded proteins are thought to associate with each other to form heteromeric channels (3, 4). |
| **Product Categories/Family for anti-Trpv3 antibody** | Ion Channels; Neuroscience |
| **References** | 1. Hille B. (2001) Ion Channels of Excitable Membranes, 3rd Ed., Sinauer Associated Inc.: Sunderland, MA USA. 2. www.iochannels.org 3. Masamoto Y., Kawabata F., Fushiki T. (2009) Biosci. Biotechnol. Biochem. 73(5): 1021-1027. 4. Xiao R., et al. (2008) J Biol Chem. 283(10): 6162-6174. |

## NCBI AND UNIPROT INFORMATION

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|---|---|
| **NCBI GI #** | 429535830 |
| **NCBI GeneID** | 497948 |
| **NCBI Accession #** | NP_001020928 |
| **NCBI GenBank Nucleotide #** | NM_001025757.2 |
| **UniProt Accession #** | Q4QYD9 |
| **Molecular Weight** | 90,273 Da |
| **NCBI Official Full Name** | transient receptor potential cation channel subfamily V member 3 |
| **NCBI Official Synonym Full Names** | transient receptor potential cation channel, subfamily V, member 3 |
| **NCBI Official Symbol** | Trpv3 |
| **NCBI Protein Information** | transient receptor potential cation channel subfamily V member 3; heat sensitive channel TRPV3 |
| **UniProt Protein Name** | Heat sensitive channel TRPV3 |
| **UniProt Gene Name** | **Trpv3** |
| **UniProt Entry Name** | Q4QYD9_RAT |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: https://stage.aaabiotech.com/monoclonal/trpv3-antibody-clone-s15-4-immunofluorescence-immunoprecipitation-immunocytochemistry-western-blot-elisa/103386