Datasheet for ABIN7043843

anti-TRPV2 antibody (Extracellular)

3 Images

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Overview

Quantity:	25 µL
Target:	TRPV2
Binding Specificity:	AA 413-428, Extracellular
Reactivity:	Rat
Host:	Guinea Pig
Clonality:	Polyclonal
Conjugate:	This TRPV2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Live Cell Imaging (LCI), Immunochromatography (IC)

Product Details

Purpose:	A Guinea Pig Polyclonal Antibody to TRPV2 (VRL1) Channel
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)HQPSLDQPAIPSSKAT, corresponding to amino acid residues 413-428 of rat TRPV2
Isotype:	IgG
Specificity:	1st extracellular loop
Cross-Reactivity:	Mouse, Rat
Cross-Reactivity (Details):	Will not recognize the human epitope.
Predicted Reactivity:	Mouse - 15,16Human - will not recognize the human epitope

Product Details

Characteristics:	Guinea pig Anti-TRPV2 (VRL1) (extracellular) Antibody is directed against an epitope of rat TRPV2. Guinea pig Anti-TRPV2 (VRL1) (extracellular) Antibody (#) raised in guinea pigs, can be used in western blot and immunocytochemistry. It has been designed to recognize TRPV2 from mouse and rat samples. The antigen used to immunize guinea pigs is the same as Anti-TRPV2 (VRL1) (extracellular) Antibody (ABIN7043845, ABIN7044002 and ABIN7044003)) raised in rabbit. Our line of guinea pig antibodies enables more flexibility with our products such as multiplex staining studies, immunoprecipitation, etc.
Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	TRPV2
Alternative Name:	TRPV2 (TRPV2 Products)
Background:	Transient receptor potential cation channel subfamily V member 2, Vanilloid receptor-like protein 1, VRL-1, Osm-9-like TRP channel 2, OTRPC2, Stretch-activated channel 2B, SAC2B,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.1 The TRP channels have six putative transmembrane domains (TM) with a pore domain between the fifth and the sixth TM, and all assemble as tetramers. Both the N- and the C-termini of all TRPs are intracellular3.According to IUPHAR, the TRP family is comprised of numerous subfamilies on the basis of sequence homology, TRPC, TRPM, TRPV, TRPA, TRPML, and TRPP1-4. The TRPV subfamily consists of six members, TRPV1-65.Four members of the TRPV family have been described as thermosensitive ion channels (TRPV1 to TRPV4). Each channel exhibits distinct thermal activation thresholds ranging from noxious cold (52 °C) 6,7. Although it shares around 50 % homology with TRPV1, TRPV2 is not activated by capsaicin nor by protons. It has a high temperature threshold of ~52 °C and is considered to play an essential role in the perception of high-intensity noxious heat stimulation8-10. TRPV2 is also considered to be a stretch-activated channel and to play a role in skeletal and cardiac muscle degeneration and pain pathway8. The TRPV2 channel is expressed in DRG neurons, different brain regions and non-neuronal tissues such as the spleen, lung and intestine and in components of the immune system5,11,12. Alternative names: TRPV2 (VRL1), Transient receptor potential cation channel subfamily V member 2, Vanilloid receptor-like protein 1, VRL-1, Osm-9-like TRP channel 2, OTRPC2, Stretch-activated channel 2B, SAC2B

Target Details

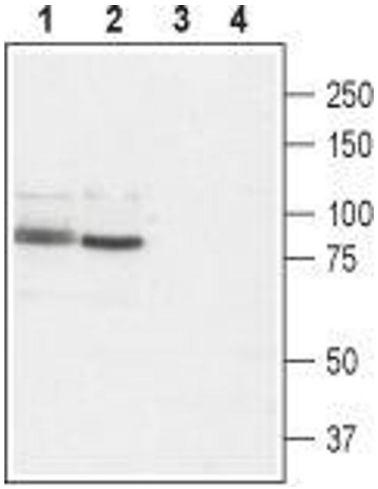
Gene ID:	29465
NCBI Accession:	NM_016113
UniProt:	Q9WUD2
Pathways:	Regulation of Cell Size

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: 1:60 Application Dilutions Western blot wb: 1:2000
Comment:	Cited Application: ICC Negative Control: BLP-CC039 Blocking Peptide: BLP-CC039
Restrictions:	For Research Use only

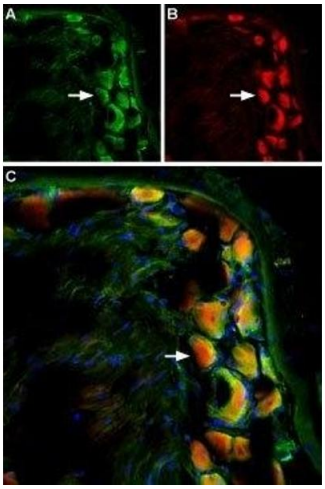
Handling

Format:	Lyophilized
Reconstitution:	0.2 mL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).



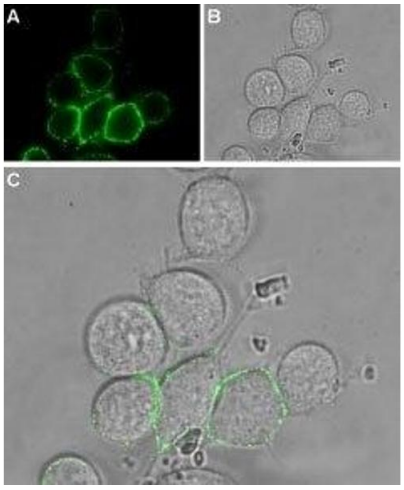
Western Blotting

Image 1. Western blot analysis of rat brain (lanes 1 and 3) and rat RBL basophilic leukemia cell lysate (lanes 2 and 4): -1,2. Guinea pig Anti-TRPV2 (VRL1) (extracellular) Antibody (ABIN7043843, ABIN7045390 and ABIN7045391), (1:2000).3,4. Guinea pig Anti-TRPV2 (VRL1) (extracellular) Antibody, preincubated with TRPV2/VRL1 (extracellular) Blocking Peptide (#BLP-CC039).



Immunohistochemistry

Image 2. Multiplex staining of TRPV2 and mGluR5 in rat DRG - Immunohistochemistry of rat dorsal root ganglion using Guinea pig Anti-TRPV2 (VRL1) (extracellular) Antibody (ABIN7043843, ABIN7045390 and ABIN7045391) (1:60) and Anti-mGluR5 (extracellular)-ATTO Fluor-594 Antibody (ABIN7043251), (red), (1:60). A. TRPV2 staining (green). B. mGluR5 staining (red). C. Merge of A and B demonstrates co-localization of TRPV2 and mGluR5 in DRG cells. Nuclei are stained using DAPI as the counterstain (blue).



Immunocytochemistry

Image 3. Expression of TRPV2 in rat RBL cells - Cell surface detection of TRPV2 in intact living rat basophilic leukemia (RBL) cells. A. Extracellular staining of cells using Guinea pig Anti-TRPV2 (VRL1) (extracellular) Antibody (ABIN7043843, ABIN7045390 and ABIN7045391), (1:100) followed by goat anti-guinea pig-AlexaFluor-488 secondary antibody (green). B. Live view of the cells. C. Merge image of A and B.