NEUROMICS

VR1 N-terminus (TRPV1) Data Sheet

Catalog Number:	RA10110	**Host:**	Rabbit
Product Type:	Polyclonal antiserum	**Species Reactivity:**	Rat
Immunogen Sequence:	RASLDSEESESPPQENSC-Corresponding rat VR1	**Format:**	Whole Serum (with 0.05% to residues 4-21 of the amino-terminus of sodium azide) Sent in liquid form
Applications:	Immunohistochemistry 1:50-1:1000 Immunocytochemistry 1:50- 1:1000 Western Blotting 1:1000		

Storage: Dilutions listed as a recommendation. Optimal dilution should be determined by investigator. Store frozen. Aliquot as undiluted serum and immediately place at -20ºC. Serum may have become trapped in top of vial during shipping. Centrifugation of vial is recommended before opening. Stable for at least 6 months at -20ºC. Repeated freeze/thaw cycles compromise the integrity of the antiserum.

References:

Lintao Qua, Pu Zhang, Robert H. LaMotte and Chao Ma. Neuronal Fc-gamma receptor I mediated excitatory effects of IgG immune complex on rat dorsal root ganglion neurons. Brain, Behavior, and Immunity. doi:10.1016/j.bbi.2011.04.008.

T. Wu, L. Song, X. Shi, Z. Jiang, J. Santos-Sacchi and A.L. Nuttal. Effect of capsaicin on potassium conductance and electromotility of guinea pig outer hair cell. doi:10.1016/j.heares.2010.10.010

Muthu D. Bhaskaran and Bret N. Smith. Effects of TRPV1 activation on synaptic excitation in the dentate gyrus of a mouse model of temporal lobe epilepsy. doi:10.1016/j.expneurol.2010.01.021

Sonia K Bhangoo, Matthew S Ripsch, David J Buchanan, Richard J Miller and Fletcher A White. Increased chemokine signaling in a model of HIV1-associated peripheral neuropathy. Molecular Pain 2009, 5:48doi:10.1186/1744-8069-5-48.

Application Notes

Immunohistochemistry:
Antiserum was used on perfusion fixed tissue. Perfusion: 1) calcium-free Tyrode's solution, 2) fixative, and 3) 10% sucrose in PBS as a cryo-protectant. Desired tissues were dissected and stored overnight in 10% sucrose in PBS. Slide-mounted tissue sections were processed for indirect immunofluorescence. Slides were incubated with blocking buffer for 1 hour at room temperature. Primary antiserum was diluted with blocking buffer to the appropriate working concentration. Blocking buffer was removed and slides were incubated for 18-24 hours at 4ºC with primary antiserum. Slides were rinsed 3 times and then incubated with secondary antibodies for 1 hour at room temperature. Slides were again rinsed 3 times and coverslipped. Staining was examined using fluorescence microscopy.

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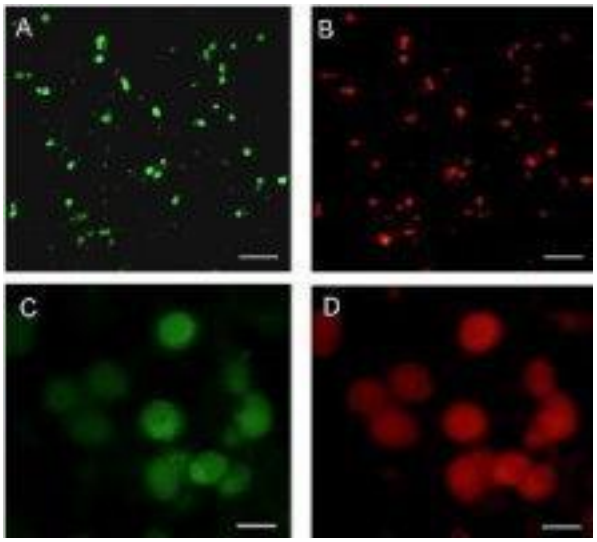
Immunocytochemistry:
VR1 transfected cells were processed for indirect immunofluorescence. Media was removed and cells were gently washed 3 times with serum-free media. Following fixation procedure, cells were processed for indirect immunofluorescence as described above.

Western Blotting:
For more information see Guo, A., Vulchanova, L., Wang, J., Li, X., an Elde, R. (1999). Immunocytochemical localization of the vanilloid receptor 1 (VR1): relationship to neuropeptides, the P2X3 purinoceptor and IB4 binding sites. Eur J Neurosci 11, 946-58.
Note: Sodium azide (NaN3) interferes with peroxidase reactions and should not be used with peroxidase methodologies. If sodium azide is present in any steps of the staining procedure, the tissue should thoroughly be rinsed with sodium azide-free buffer before performing the peroxidase reaction.

Image: CGRP and TRPV1 are co-expressed in most cultured trigeminal ganglion neurons. (A and C) CGRP expression in d2 trigeminal ganglion neurons plated on poly-d-lysine-coated coverslips. (B and D) The same culture shown in panel A or C costained for TRPV1 expression. Magnification bar = 200m (A and B) or 40m (C and D). Journal of Ethnopharmacology 115 (2008) 238– 248.



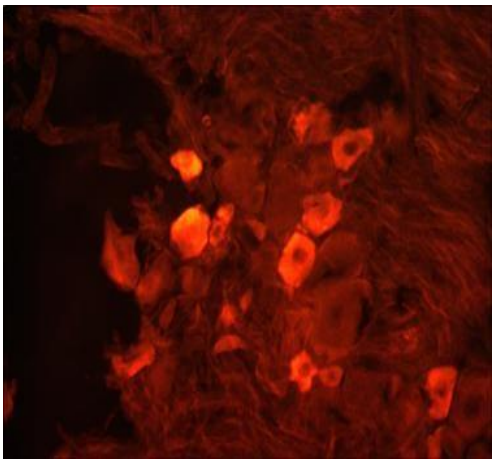


Image: TRPV1 staining in rat trigeminal ganglion. Image courtesy of Dr. Norman Capra, University of Maryland

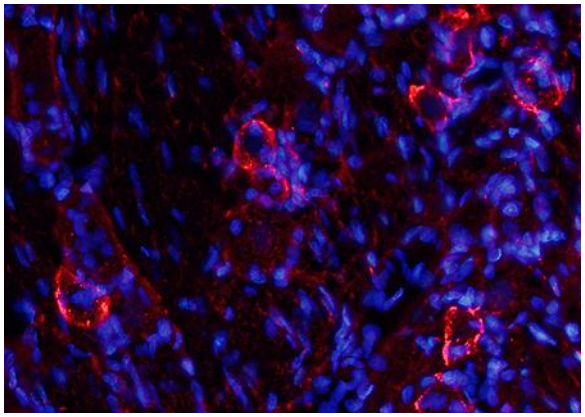


Image: VR1 staining in rat DRGS. Lot 403429

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