

# Polyclonal Anti-TRPV2 Antibody

Catalog Number: PA1977

## Description

<b>Gene Name</b>	transient receptor potential cation channel, subfamily V, member 2
<b>Recommended Protein Name</b>	Transient receptor potential cation channel subfamily V member 2
<b>Lot No.</b>	0191312c017795
<b>Size</b>	100µg/vial
<b>Form</b>	lyophilized
<b>Ig type</b>	Rabbit IgG
<b>Specificity</b>	No cross reactivity with other proteins.
<b>Purification</b>	Immunogen affinity purified.
<b>Species</b>	<b>Reacts with:</b> human
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence at the N-terminus of human TRPV2(42-624aa QFQGEDRKFAPQIRVNLNYRK).
<b>Contents</b>	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg Thimerosal, 0.05mg NaN <sub>3</sub> .

## Application

	Concentration	Tested Species	Predicted Species	Antigen Retrieval
Western blot	0.1-0.5µg/ml	Hu	-	-
Immunohistochemistry (Paraffin-embedded Section)	0.5-1µg/ml	Hu	-	By Heat
Immunohistochemistry (Frozen Section)	0.5-1µg/ml	Hu	-	-

**WB: The detection limit for TRPV2 is approximately 0.5ng/lane under reducing conditions.**

**Tested Species:** In-house tested species with positive results.

**Predicted Species:** Species predicted to be fit for the product based on sequence similarities.

**By Heat: Boiling the paraffin sections in 10mM citrate buffer, pH6.0, for 20mins is required for the staining of formalin/paraffin sections.**

*Other applications have not been tested.*

*Optimal dilutions should be determined by end users.*

## Preparation and storage

**Reconstitution:** 0.2ml of distilled water will yield a concentration of 500µg/ml.

**Storage:** At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time.

Avoid repeated freezing and thawing.

## Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB, supported by SA1022 in IHC(P) and IHC(F).

## Background

TRPV2 (Transient Receptor Potential Cation Channel Subfamily V Member 2), also known as VRL1, is a protein that, in humans, is encoded by the TRPV1 gene. The International Radiation Hybrid Mapping Consortium mapped the TRPV2 gene to chromosome 17. This gene encodes an ion channel that is activated by high temperatures above 52 °C. The protein may be involved in transduction of high-temperature heat responses in sensory ganglia. It is thought that in other tissues the channel may be activated by stimuli other than heat.

## Reference

1. Caterina, M. J., Rosen, T. A., Tominaga, M., Brake, A. J., Julius, D. A capsaicin-receptor homologue with a high threshold for noxious heat. *Nature* 398: 436-441, 1999.
2. Iwata, Y., Katanosaka, Y., Arai, Y., Shigekawa, M., Wakabayashi, S. Dominant-negative inhibition of Ca<sup>2+</sup> influx via TRPV2 ameliorates muscular dystrophy in animal models. *Hum. Molec. Genet.* 18: 824-834, 2009.