

For Research Use Only

# TRPV4 Polyclonal antibody

Catalog Number: 20987-1-AP

Featured Product

14 Publications



## Basic Information

<b>Catalog Number:</b> 20987-1-AP	<b>GenBank Accession Number:</b> NM_021625	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 500 µg/ml by Nanodrop and 520 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 59341	<b>Recommended Dilutions:</b> IHC 1:50-1:500
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q9HBA0	
<b>Isotype:</b> IgG	<b>Full Name:</b> transient receptor potential cation channel, subfamily V, member 4	
	<b>Calculated MW:</b> 98 kDa	

## Applications

<b>Tested Applications:</b> IHC, ELISA	<b>Positive Controls:</b> IHC : human brain tissue,
<b>Cited Applications:</b> IHC	
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> human, rat, mouse	

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

TRPV4, also named as VRL2 and VROAC, belongs to the transient receptor family and TrpV subfamily. It is a non-selective calcium permeant cation channel protein which involved in osmotic sensitivity and mechanosensitivity. Activation by exposure to hypotonicity within the physiological range exhibits an outward rectification. It is activated by low pH, citrate and phorbol esters. Channel activity seems to be regulated by a calmodulin-dependent mechanism with a negative feedback mechanism. Defects in TRPV4 are the cause of brachyolmia type 3 (BRAC3), spondylometaphyseal dysplasia Kozlowski type (SMDK) and metatropic dysplasia (MTD). Multiple transcript variants encoding different isoforms have been found.

## Notable Publications

Author	Pubmed ID	Journal	Application
Eszter Ducza	31687520	Heliyon	IHC
Jiufei Duan	31662264	Environ Pollut	IHC
Wei Li	34637786	Neuropharmacology	

## Storage

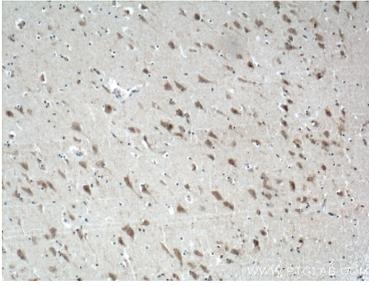
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

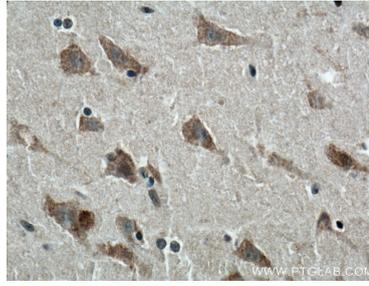
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

## Selected Validation Data



Immunohistochemical analysis of paraffin-embedded human brain tissue slide using 20987-1-AP (TRPV4 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human brain tissue slide using 20987-1-AP (TRPV4 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).