For Research Use Only

TRPC4 Polyclonal antibody

Catalog Number:21349-1-AP 4 Publications

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Basic Information

Catalog Number:
21349-1-AP

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG15698

GenBank Accession Number:
BC104725

GeneID (NCBI):
7223

UNIPROT ID:
Q9UBN4

Full Name:
transient receptor potential cation channel, subfamily C, member 4

Calculated MW:
977 aa, 112 kDa

Observed MW:
100-120 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB: 1:500-1:3000
IHC: 1:20-1:200

Applications

Tested Applications:
WB, IHC, ELISA

Cited Applications:
WB

Species Specificity:
human, mouse, rat

Cited Species:
human, rat

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

Positive Controls:

WB : HEK-293 cells, mouse brain tissue, rat brain tissue

IHC : human kidney tissue,

Background Information

TRPC4 (Transient Receptor Potential Paradigm 4) is a non-selective calcium channel protein widely found in the nervous system and cardiovascular system. TRPC4 regulates intracellular calcium levels through the activation of signaling pathways mediated by Gq/11 and Gi/o-coupled receptors, and is involved in neurotransmission, neuronal excitability, and vascular endothelial cell function. In the nervous system, TRPC4 is associated with neuropsychiatric disorders such as depression and anxiety, and its inhibitors show antidepressant and anxiolytic potential. In the cardiovascular system, TRPC4 affects vascular permeability and diastolic function by regulating calcium ion inward flow and plays an important role in hypoxia-induced pulmonary hypertension. In addition, TRPC4 is involved in thermoregulation, sensing changes in internal temperature to regulate the drop in body temperature. aberrant expression of TRPC4 is associated with a variety of diseases, making it a potential therapeutic target!

Notable Publications

Author	Pubmed ID	Journal	Application
Da-Cen Lin	34311033	Cancer Lett	WB
Jingjing Duan	31355338	Sci Adv	
Suya Zhang	42002092	Eur J Pharmacol	WB

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
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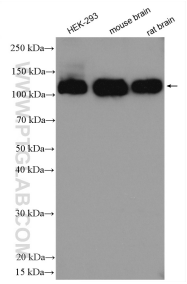
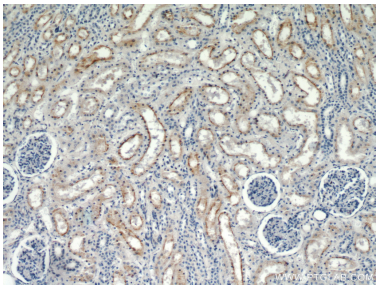
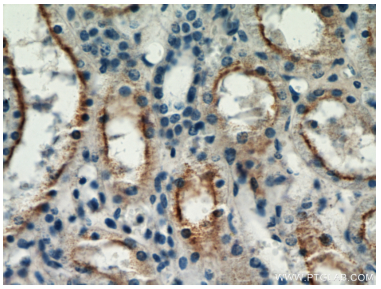
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 21349-1-AP (TRPC4 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human kidney using 21349-1-AP (TRPC4 antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human kidney using 21349-1-AP (TRPC4 antibody) at dilution of 1:50 (under 40x lens).