

For Research Use Only

TPC1 Polyclonal antibody

Catalog Number: 23758-1-AP

Featured Product

2 Publications



Basic Information

Catalog Number:

23758-1-AP

Size:

650 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG20607

GenBank Accession Number:

BC136795

GeneID (NCBI):

53373

UNIPROT ID:

Q9ULQ1

Full Name:

two pore segment channel 1

Calculated MW:

816 aa, 94 kDa

Observed MW:

94 kDa

Purification Method:

Antigen Affinity purified

Recommended Dilutions:

WB 1:1000-1:6000

IHC 1:50-1:500

IF/ICC 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB

Species Specificity:

human, mouse, rat

Cited Species:

mouse

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 : mouse heart tissue, rat heart tissue

IHC : mouse heart tissue,

IF/ICC : HepG2 cells,

Background Information

Two-pore channels (TPCs) are ancient members of the voltage-gated ion channel superfamily, are thought to be non-selective cation channels permeable to Ca^{2+} . They mediate their physiological effects through releasing Ca^{2+} from acidic organelles in response to cues such as the second messenger, NAADP (nicotinic acid adenine dinucleotide phosphate). Genetic knockout and pharmacological inhibition experiments demonstrate that the two-pore channels, TPC1 and TPC2, are required for infection by Filoviruses Ebola and Marburg in mice.(PMID: 29746898; PMID 25722412) Two pore segment channel 1 (TPC1) is a human protein encoded by the TPCN1 gene.

Notable Publications

Author	Pubmed ID	Journal	Application
Yayu Wang	34910516	Sci Adv	WB
Bing-Qian Su	38295116	PLoS Pathog	

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

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

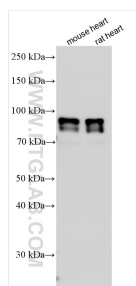
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E: Proteintech-CN@ptglab.com

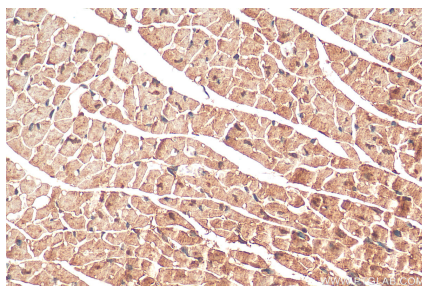
W: ptgcn.com

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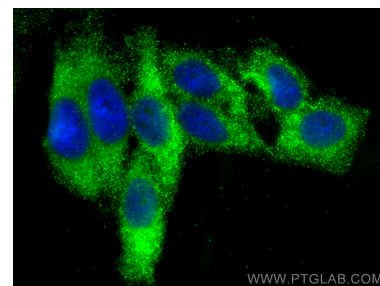
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 23758-1-AP (TPC1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 23758-1-AP (TPCN1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using TPC1 antibody (23758-1-AP) at dilution of 1:200 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).