

For Research Use Only

TRPM5 Polyclonal antibody

Catalog Number: 18027-1-AP

Featured Product

10 Publications



Basic Information

Catalog Number:

18027-1-AP

Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG12593

GenBank Accession Number:

BC093787

GeneID (NCBI):

29850

UNIPROT ID:

Q9NZQ8

Full Name:

transient receptor potential cation channel, subfamily M, member 5

Calculated MW:

98 kDa, 131 kDa

Observed MW:

98 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:500-1:1000

IHC: 1:50-1:500

IF: 1:50-1:200

FC (Intra): 0.40 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF, FC (Intra), ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat

Positive Controls:

WB: mouse liver tissue,

IHC: human small intestine tissue,

IF: mouse olfactory epithelium tissue,

FC (Intra): LNCaP cells,

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

Transient receptor potential (TRP) proteins are a diverse family of proteins with structural features typical of ion channels (PMID: 14634208). TRPM5 is a member of the TRPM (melastatin-like) subfamily which are Ca²⁺-permeable cation channels localized predominantly to the plasma membrane (PMID: 11864597). TRPM5 plays a central role in taste transduction (PMID: 17610722). TRPM5 is implicated in enhancing TRPA1 expression and may be involved in regulating insulin secretion (PMID: 21932052). Alternative splicing results in transcript variants encoding distinct isoforms with calculated molecular weights of 98 kDa or 131 kDa. It has been reported that TRPM5 is N-linked glycosylated at a unique site and TRPM5 glycosylation seems not to be involved in channel trafficking, but mainly in its functional regulation (PMID: 24605085).

Notable Publications

Author	Pubmed ID	Journal	Application
Lynnette Phillips McCluskey	31669578	Appetite	IF
Zhen Xiong	35320705	Immunity	WB
Kunitoshi Uchida	33553759	Heliyon	IF

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

*** 20ul sizes contain 0.1% BSA

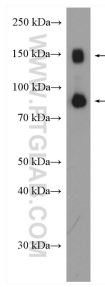
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

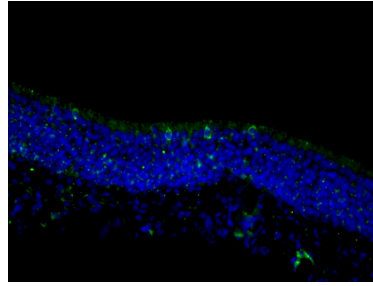
E: proteintech@ptglab.com
W: ptglab.com

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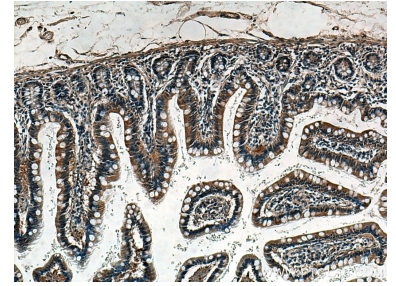
Selected Validation Data



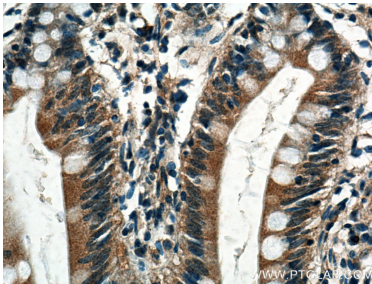
mouse liver tissue were subjected to SDS PAGE followed by western blot with 18027-1-AP (TRPM5 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



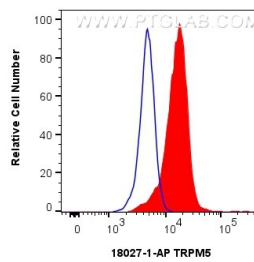
Fluorescent IHC on 1%PLP fixed frozen mouse olfactory epithelium tissue of TRPM5 antibody (18027-1-AP, 1:200). Microvillar cell staining in the apical layer. By Dr. Brian Lin (Schwob Lab).



Immunohistochemical analysis of paraffin-embedded human small intestine tissue slide using 18027-1-AP (TRPM5 antibody) at dilution of 1:200 (under 10x lens)..



Immunohistochemical analysis of paraffin-embedded human small intestine tissue slide using 18027-1-AP (TRPM5 antibody) at dilution of 1:200 (under 40x lens)..



1x10⁶ LNCaP cells were intracellularly stained with 0.4 ug TRPM5 Polyclonal antibody (18027-1-AP) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.4 ug Rabbit IgG control Rabbit PolyAb (30000-O-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).