

For Research Use Only

TMEM27 Polyclonal antibody

Catalog Number: 19207-1-AP



Basic Information

Catalog Number: 19207-1-AP	GenBank Accession Number: BC050606	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 333 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 57393	Recommended Dilutions: WB 1:500-1:2000 IHC 1:100-1:400 IF 1:10-1:100
Source: Rabbit	Full Name: transmembrane protein 27	
Isotype: IgG	Calculated MW: 25 kDa	
Immunogen Catalog Number: AG7668	Observed MW: 32 kDa	

Applications

Tested Applications:

IF, IHC, WB, ELISA

Species Specificity:

human, 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 pancreas tissue, mouse kidney tissue

IHC : human kidney tissue, human liver cancer tissue

IF : HepG2 cells,

Background Information

TMEM27 (also termed collectrin), a 46 kDa type I transmembrane protein, is a homolog of the noncatalytic domain of angiotensin-converting enzyme-related carboxypeptidase (Ace2). Its expression has only been reported in the brush border membrane of the proximal tubules and collecting ducts of the kidney and in the pancreatic b cell (PMID: 11278314, 16330324). Overexpression of TMEM27 in b cells leads to increased proliferation in vitro and increased pancreatic b cell mass in vivo, and also has been reported to augment glucosestimulated ins secretion (GSIS) (PMID: 16330324, 16330323). The abundance of TMEM27 protein in b cells is furthermore regulated by ectodomain cleavage, which leads to two cleavage products, a 25 kDa N-terminal part that is released into the extracellular space (the shed fragment), and a 22 kDa C-terminal fragment (CTF) remaining in the membrane that is rapidly degraded (PMID: 16330324). TMEM27 is an N-glycosylated protein and can form dimers with MW of 64-75 kDa (patent US 20100119489 A1). TMEM27 can be used as a beta cell mass biomarker (PMID: 20386877, 21907142).

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

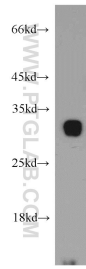
For technical support and original validation data for this product please contact:

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

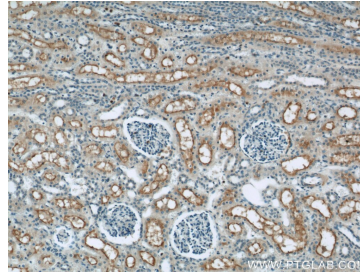
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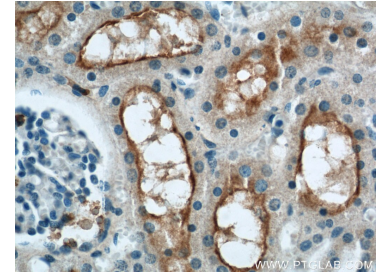
Selected Validation Data



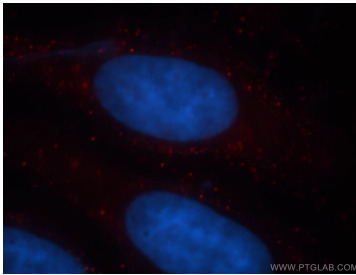
mouse pancreas tissue were subjected to SDS PAGE followed by western blot with 19207-1-AP (TMEM27 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human kidney using 19207-1-AP (TMEM27 antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human kidney using 19207-1-AP (TMEM27 antibody) at dilution of 1:50 (under 40x lens).



Immunofluorescent analysis of HepG2 cells, using TMEM27 antibody 19207-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).