

For Research Use Only

TMEM27 Polyclonal antibody

Catalog Number: 14571-1-AP



Basic Information

Catalog Number: 14571-1-AP	GenBank Accession Number: BC050606	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 200 ug/ml by Nanodrop and 133 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 57393	Recommended Dilutions: WB 1:500-1:2000
Source: Rabbit	UNIPROT ID: Q9HBJ8	
Isotype: IgG	Full Name: transmembrane protein 27	
Immunogen Catalog Number: AG6187	Calculated MW: 25 kDa	
	Observed MW: 20 kDa	

Applications

Tested Applications: WB, ELISA	Positive Controls: WB : mouse pancreas tissue, human spleen tissue, MCF-7 cells, mouse kidney tissue
Species Specificity: human, mouse, rat	

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 glucocorticosteroid-stimulated 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

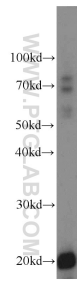
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 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 14571-1-AP (TMEM27 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.