

TMEM27 Recombinant antibody

Catalog Number: 82853-2-RR

Basic Information

Catalog Number: 82853-2-RR	GenBank Accession Number: BC050606	Purification Method: Protein A purification
Size: 1000 µg/ml	GeneID (NCBI): 57393	CloneNo.: 240437C2
Source: Rabbit	UNIPROT ID: Q9HBJ8	Recommended Dilutions: WB 1:5000-1:50000
Isotype: IgG	Full Name: transmembrane protein 27	
Immunogen Catalog Number: AG7668	Calculated MW: 25 kDa	
	Observed MW: 35-40 kDa	

Applications

Tested Applications: WB, ELISA	Positive Controls: WB : mouse kidney tissue, rat kidney tissue
Species Specificity: human	

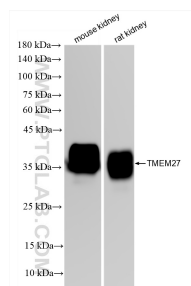
Background Information

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).

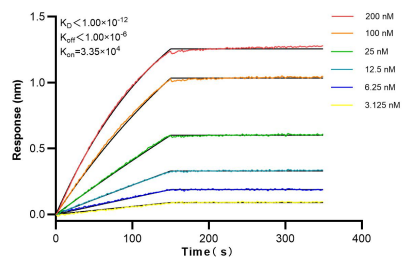
Storage

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

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 82853-2-RR (TMEM27 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Biolayer interferometry (BLI) kinetic assays of 82853-2-RR against Human TMEM27 were performed. The affinity constant is below 1 pM.