## For Research Use Only

## TMEM27 Recombinant antibody

Catalog Number:82853-2-RR



**Purification Method:** 

Protein A purfication

Recommended Dilutions:

WB 1:5000-1:50000

CloneNo.:

240437C2

**Basic Information** 

**Applications** 

Catalog Number: GenBank Accession Number:

82853-2-RR BC050606 GeneID (NCBI): 100ul , Concentration: 1000 ug/ml by 57393

Nanodrop: **UNIPROT ID:** Q9HBJ8 Rabbit Full Name:

Isotype: transmembrane protein 27

IgG Calculated MW: Immunogen Catalog Number: 25 kDa AG7668

Observed MW: 35-40 kDa

**Tested Applications: Positive Controls:** 

WB, ELISA WB: mouse kidney tissue, rat kidney tissue Species Specificity:

**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

human

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

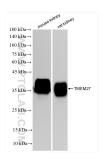
Aliquoting is unnecessary for -20°C storage

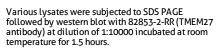
\*\*\* 20ul sizes contain 0.1% BSA

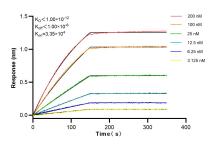
in USA), or 1(312) 455-8498 (outside USA)

W: ptglab.com

## Selected Validation Data







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