For Research Use Only

TMEM27 Polyclonal antibody

Catalog Number:24059-1-AP



Basic Information

Catalog Number:

24059-1-AP

Size:

GenBank Accession Number:

BC050606

GeneID (NCBI):

150ul, Concentration: 450 ug/ml by Nanodrop and 307 ug/ml by Bradford $\,$ UNIPROT ID: method using BSA as the standard;

57393 Q9HBJ8

Source: Full Name:

Rabbit transmembrane protein 27

Isotype Calculated MW: 25 kDa Immunogen Catalog Number: Observed MW: AG21257 23 kDa

Purification Method:

WB 1:200-1:1000

Antigen affinity purification

Recommended Dilutions:

Applications

Tested Applications:

WB, ELISA

Species Specificity:

human

Positive Controls:

WB: HEK-293 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 (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:

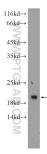
Store at -20°C. Stable for one year after shipment.

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

Selected Validation Data



HEK-293 cells were subjected to SDS PAGE followed by western blot with 24059-1-AP (TMEM27 Antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.