For Research Use Only

TMEM27 Polyclonal antibody

Catalog Number:24059-1-AP



Basic Information

Catalog Number:

GenBank Accession Number: BC050606

Antigen affinity purification

Purification Method:

24059-1-AP Size:

GeneID (NCBI): 57393 Recommended Dilutions: WB 1:200-1:1000

450 μg/ml Source: Rabbit

Isotype:

UNIPROT ID: Q9HBJ8

Full Name:

transmembrane protein 27

Immunogen Catalog Number:

Calculated MW:

AG21257 25 kDa

Observed MW:

23 kDa

Applications

Tested Applications:

Positive Controls:

WB,ELISA

WB: HEK-293 cells,

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 (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

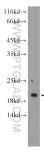
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



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.