

# TMEM27 Polyclonal antibody

Catalog Number: **14571-1-AP**

## Basic Information

**Catalog Number:**

14571-1-AP

**Size:**

200 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG6187

**GenBank Accession Number:**

BC050606

**GeneID (NCBI):**

57393

**UNIPROT ID:**

Q9HBJ8

**Full Name:**

transmembrane protein 27

**Calculated MW:**

25 kDa

**Observed MW:**

20 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:500-1:2000

## Applications

**Tested Applications:**

WB, ELISA

**Species Specificity:**

human, mouse, rat

**Positive Controls:**WB : mouse pancreas tissue, human spleen tissue,  
MCF-7 cells, mouse kidney tissue

## 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:**

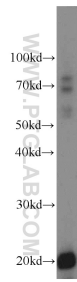
Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

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

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



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.