

Human TMEM27 Protein (Fc Tag)

Catalog Number: 13301-H02H



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

NX-17; NX17; 0610008J07Rik; NX-17; NX17

Protein Construction:

A DNA sequence encoding the human TMEM27 (Q9HBJ8) (Met1-Pro141) was expressed, fused with the Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Glu 15

Molecular Mass:

The recombinant human TMEM27 /Fc is a disulfide-linked homodimer. The reduced monomer comprises 368 amino acids and has a predicted molecular mass of 41.4 kDa. The apparent molecular mass of the protein is approximately 53-57 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

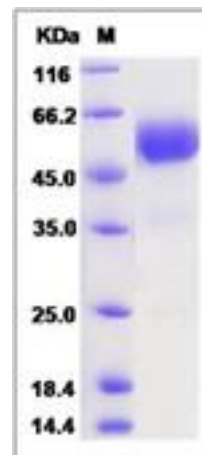
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

TMEM27 is a membrane protein. It has been proposed as a beta cell mass biomarker since it is cleaved and shed by pancreatic beta cells. Overexpression of TMEM27 leads to increased thymidine incorporation, whereas silencing of Tmem27 using RNAi results in a reduction of cell replication. Furthermore, transgenic mice with increased expression of Tmem27 in pancreatic beta cells exhibit increased beta cell mass. TMEM27 is also important for trafficking amino acid transporters to the apical brush border of proximal tubules.

References

1. Pasquali L, *et al.* (2009) Collectrin gene screening in Turner syndrome patients with kidney malformation. *J Genet.* 88(1):105-8.
2. Tosetto E, *et al.* (2009) Locus heterogeneity of Dent's disease: OCRL1 and TMEM27 genes in patients with no CLCN5 mutations. *Pediatr Nephrol.* 24(10):1967-73.
3. Singer D, *et al.* (2011) Collectrin and ACE2 in renal and intestinal amino acid transport. *Channels (Austin).* 5(5):410-23.

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Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>