

Human TSPAN1 Protein (aa 110-211, His Tag)



Sino Biological
Biological Solution Specialist

Catalog Number: 13073-H07H

General Information

Gene Name Synonym:

NET1; TM4C; TM4SF; TSPAN1

Protein Construction:

A DNA sequence encoding the human TSPAN1 (O60635) (Tyr110-Asn211) was expressed with an N-terminal polyhistidine tag.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: (35.8+ 40.6+11.0+9.6) % 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: His

Molecular Mass:

The recombinant human TSPAN1 comprises 122 amino acids and has a predicted molecular mass of 14.1 kDa. The apparent molecular mass of the protein is approximately 32, 27, 18 and 14 kDa in SDS-PAGE under reducing conditions due to glycosylation.

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:

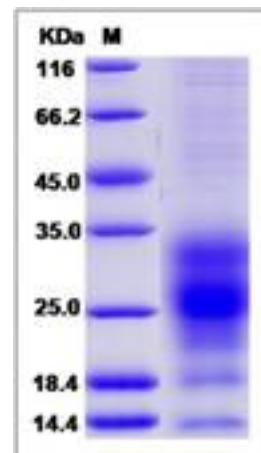
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

TSPAN1 belongs to the transmembrane 4 superfamily, also known as the tetraspanin family. Tetraspanins have four hydrophobic domains, intracellular N- and C-termini and two extracellular domains. Tetraspanins act as scaffolding proteins, anchoring multiple proteins to one area of the cell membrane. They also mediate signal transduction events that play a role in the regulation of cell development, activation, growth and motility. TSPAN1 interacts with human thiamine transporter-1 (hTHTR-1). HTHTR-1 contributes to intestinal thiamine uptake, and its function is regulated at both the transcriptional and posttranscriptional levels. TSPAN1 and hTHTR-1 colocalize in human intestinal epithelial HuTu-80 cells. Coexpression of TSPAN1 in these cells led to a significant decrease in the rate of degradation of hTHTR-1 compared with cells expressing the hTHTR-1 alone; in fact the half-life of the TSPAN1 protein was twice longer in the former cell type compared with the latter cell type.

References

1.Chen L. et al., 2010, J Korean Med Sci. 25 (10): 1438-42. 2.Chen L. et al., 2010, Tumori. 96 (5): 744-50. 3.Nabokina SM. et al., 2011, Am J Physiol Gastrointest Liver Physiol. 301 (5): G808-13.

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