

## Product datasheet

### Recombinant Human TMP21 protein ab167877

1 Image

#### Description

<b>Product name</b>	Recombinant Human TMP21 protein
<b>Purity</b>	> 85 % SDS-PAGE. purified by using conventional chromatography techniques.
<b>Expression system</b>	Escherichia coli
<b>Accession</b>	<b><u>P49755</u></b>
<b>Protein length</b>	Protein fragment
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Sequence</b>	MGSSHHHHHH SSGLVPRGSH MGSISFHLPI NSRKCLREEI HKDLLVTGAY EISDQSGGAG GLRSHLKITD SAGHILYSKE DATKGKFAFT TEDYDMFEVC FESKGTGRIP DQLVILDMKH GVEAKNYEEI AKVEKLKPLE VELRRLEDLS ESIVNDFAYM KKREEEMRDT NESTNTR
<b>Predicted molecular weight</b>	20 kDa including tags
<b>Amino acids</b>	32 to 185
<b>Tags</b>	His tag N-Terminus

#### Specifications

Our **Abpromise guarantee** covers the use of **ab167877** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	SDS-PAGE Mass Spectrometry
<b>Mass spectrometry</b>	MALDI-TOF
<b>Form</b>	Liquid

#### Preparation and Storage

<b>Stability and Storage</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
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pH: 8.00

Constituents: 0.32% Tris-HCl buffer, 30% Glycerol (glycerin, glycerine), 0.88% Sodium chloride

## General Info

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### Function

Involved in vesicular protein trafficking. Mainly functions in the early secretory pathway. Thought to act as cargo receptor at the luminal side for incorporation of secretory cargo molecules into transport vesicles and to be involved in vesicle coat formation at the cytoplasmic side. In COPII vesicle-mediated anterograde transport involved in the transport of GPI-anchored proteins and proposed to act together with TMED2 as their cargo receptor; the function specifically implies SEC24C and SEC24D of the COPII vesicle coat and lipid raft-like microdomains of the ER. Recognizes GPI anchors structural remodeled in the ER by PGAP1 and MPPE1 (By similarity). In COPI vesicle-mediated retrograde transport involved in the biogenesis of COPI vesicles and vesicle coat recruitment. On Golgi membranes, acts as primary receptor for ARF1-GDP which is involved in COPI-vesicle formation. Increases coatamer-dependent GTPase-activating activity of ARFGAP2. Involved in trafficking of G protein-coupled receptors (GPCRs). Regulates F2LR1, OPRM1 and P2RY4 exocytic trafficking from the Golgi to the plasma membrane thus contributing to receptor resensitization. Involved in trafficking of amyloid beta A4 protein and soluble APP-beta release (independent of modulation of gamma-secretase activity). As part of the presenilin-dependent gamma-secretase complex regulates gamma-cleavages of the amyloid beta A4 protein to yield amyloid-beta 40 (Abeta40). Involved in organization of the Golgi apparatus.

### Tissue specificity

Ubiquitous.

### Sequence similarities

Belongs to the EMP24/GP25L family.  
Contains 1 GOLD domain.

### Domain

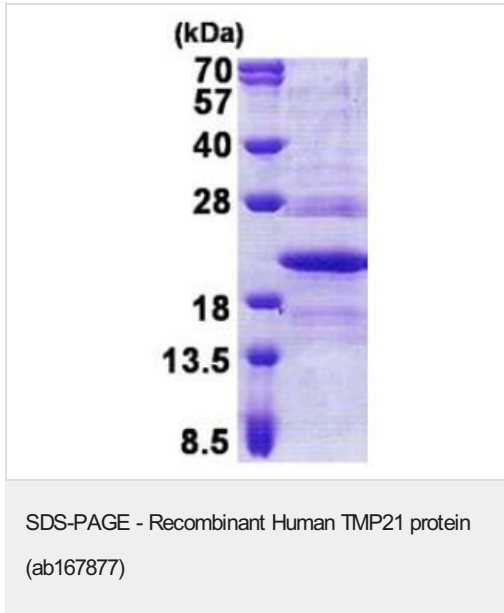
The luminal domain mediates localization to the plasma membrane by partially overriding the ER retention by the cytoplasmic domain.

### Cellular localization

Golgi apparatus > cis-Golgi network membrane. Melanosome. Endoplasmic reticulum membrane. Endoplasmic reticulum-Golgi intermediate compartment membrane. Cytoplasmic vesicle > secretory vesicle membrane. Cell membrane. Golgi apparatus > trans-Golgi network membrane. Identified by mass spectrometry in melanosome fractions from stage I to stage IV. Cycles between compartments of the early secretory pathway.

## Images

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15% SDS-PAGE analysis of ab167877 (3µg)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

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