



Sheep Anti-Rat TGOLN1 Polyclonal Antibody (CABT-BL3564)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	Human embryonic kidney cell line HEK293-derived recombinant rat TGN38 (Leu18-Ser303)
Isotype	IgG
Source/Host	Sheep
Species Reactivity	Rat
Purification	Affinity Purified
Conjugate	Unconjugated
Applications	WB, ICC/IF
Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Format	Lyophilized
Size	100 µg
Buffer	PBS with Trehalose.
Preservative	None
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.
Ship	Wet ice

BACKGROUND

Introduction

TGN38 (Trans-Golgi network integral membrane protein TGN38) is an 80-100 kDa integral membrane protein that is associated with intracellular trafficking. Its name derives from the fact that its predicted MW is 38 kDa. Although TGN38 cycles continuously between the Golgi and plasma membrane via endosomal vesicles, it is principally localized to the Golgi apparatus. Functionally, TGN38 is involved in both the formation of secretory vesicles, and in the process of clathrin-mediated endocytosis. This is accomplished through the creation of a 250 kDa cytoplasmic complex composed of a Tgoln1 dimer, Rab6, and other molecules that interact with the F-actin binding proteins neurabin-I and -II. This interaction likely contributes to directional vesicle trafficking. Mature rat Tgoln1 is a type I transmembrane glycoprotein that is 340 amino acids (aa) in length. It contains a 286 aa extracellular/luminal region (aa 18-303) plus a 33 aa cytoplasmic domain (aa 325-357). The luminal region appears to be heavily glycosylated with both O- and N-linked carbohydrate, some of which terminates in polysialylation; the cytoplasmic domain contains a cytosolic trafficking motif that encompasses aa 348-353. There is one splice variant (TGN41) that contains a 26 aa substitution for the three C-terminal aa of TGN38. It has been suggested that this may heterodimerize with TGN38. Over aa 18-303, rat TGN38/Tgoln1 shares 67% aa sequence identity with the mouse ortholog to rat Tgoln1.

Keywords

TGOLN1;trans-golgi network protein;trans-Golgi network integral membrane protein
TGN38;trans-golgi network protein 1;trans-golgi network protein 2;Tgn38

GENE INFORMATION

Gene Name

Ttgn1

Entrez Gene ID

[192152](#)

UniProt ID

[P19814](#)