

TGN38 (h): 293T Lysate: sc-114787

BACKGROUND

TGN38 (*trans*-Golgi network protein 2) is a type I integral membrane protein that constitutively cycles between the TGN and plasma membrane where it partitions nascent proteins into carrier vesicles for transport to appropriate destinations in the cell. The cytosolic domain of TGN38 interacts with AP2 Clathrin adaptor complexes via the tyrosine-containing motif (SDYQRL) to direct internalization from the plasma membrane. N- and O-linked oligosaccharide chains attach to the core TGN38 protein to produce a protein present in brain, lung and kidney.

REFERENCES

1. Luzio, J.P., et al. 1990. Identification, sequencing and expression of an integral membrane protein of the *trans*-Golgi network (TGN38). *Biochem. J.* 270: 97-102.
2. Ghosh, R.N., et al. 1998. An endocytosed TGN38 chimeric protein is delivered to the TGN after trafficking through the endocytic recycling compartment in CHO cells. *J. Cell Biol.* 142: 923-936.
3. Stephens, D.J. and Banting, G. 1999. Direct interaction of the *trans*-Golgi network membrane protein, TGN38, with the F-Actin binding protein, neurabin. *J. Biol. Chem.* 274: 30080-30086.
4. Lee, S.S. and Banting, G. 2002. Characterisation of the luminal domain of TGN38 and effects of elevated expression of TGN38 on glycoprotein secretion. *Eur. J. Cell Biol.* 81: 609-621.
5. Bauer, R.A., et al. 2004. Retention and stimulus-dependent recycling of dense core vesicle content in neuro-endocrine cells. *J. Cell Sci.* 117: 2193-2202.
6. Saint-Pol, A., et al. 2004. Clathrin adaptor epsinR is required for retrograde sorting on early endosomal membranes. *Dev. Cell* 6: 525-538.
7. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 603062. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
8. LocusLink Report (LocusID: 10618). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: TGN38 (human) mapping to 2p11.2.

PRODUCT

TGN38 (h): 293T Lysate represents a lysate of human TGN38 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

TGN38 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive TGN38 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

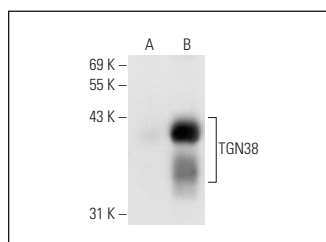
TGN38 (A-5): sc-166224 is recommended as a positive control antibody for Western Blot analysis of enhanced human TGN38 expression in TGN38 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



TGN38 (A-5): sc-166224. Western blot analysis of TGN38 expression in non-transfected: sc-117752 (A) and human TGN38 transfected: sc-114787 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.