

# TGN38 (M-290): sc-33784

## 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

- 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.
- 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.
- Stephens, D.J., et al. 1999. Direct interaction of the *trans*-Golgi network membrane protein, TGN38, with the F-actin binding protein, neurabin. *J. Biol. Chem.* 274: 30080-30086.

## CHROMOSOMAL LOCATION

Genetic locus: Tgln2 (mouse) mapping to 6 C1.

## SOURCE

TGN38 (M-290) is a rabbit polyclonal antibody raised against amino acids 18-307 mapping within an extracellular domain of TGN38 of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

TGN38 (M-290) is recommended for detection of precursor and mature TGN38A and TGN38B of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TGN38 siRNA (m): sc-44806, TGN38 shRNA Plasmid (m): sc-44806-SH and TGN38 shRNA (m) Lentiviral Particles: sc-44806-V.

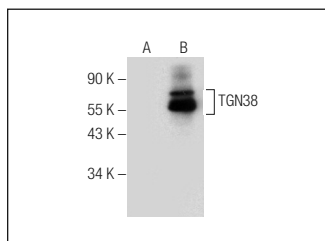
Molecular Weight of TGN38: 38 kDa.

Positive Controls: TGN38 (m2): 293T Lysate: sc-179598 or mouse brain extract: sc-2253.

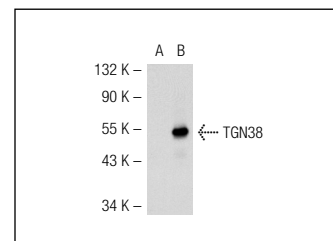
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



TGN38 (M-290): sc-33784. Western blot analysis of TGN38 expression in non-transfected: sc-117752 (A) and mouse TGN38 transfected: sc-179598 (B) 293T whole cell lysates.



TGN38 (M-290): sc-33784. Western blot analysis of TGN38 expression in non-transfected: sc-117752 (A) and mouse TGN38 transfected: sc-124027 (B) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS

- Arandis, T., et al. 2012. Calpains mediate epithelial-cell death during mammary gland involution: mitochondria and lysosomal destabilization. *Cell Death Differ.* 19: 1536-1548.
- Guo, H.L., et al. 2012. The Axin/TNKS complex interacts with KIF3A and is required for insulin-stimulated GLUT4 translocation. *Cell Res.* 22: 1246-1257.
- Li, Q., et al. 2013. Estradiol accelerates the effects of fluoxetine on serotonin 1A receptor signaling. *Psychoneuroendocrinology* 38: 1145-1157.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **TGN38 (B-6): sc-166594** or **TGN38 (G-9): sc-271624**, our highly recommended monoclonal alternatives to TGN38 (M-290).