

# TGN38 (C-15): sc-27680

## 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.

## CHROMOSOMAL LOCATION

Genetic locus: TGNL2 (human) mapping to 2p11.2; Tgnl1 (mouse) mapping to 6 C1.

## SOURCE

TGN38 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of TGN38 of human origin.

## PRODUCT

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

TGN38 (C-15) is available conjugated to agarose (sc-27680 AC), 500 µg/0.25 ml agarose in 1 ml, for IP.

Blocking peptide available for competition studies, sc-27680 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## RESEARCH USE

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

## APPLICATIONS

TGN38 (C-15) is recommended for detection of precursor and mature TGN38 of mouse, rat and human 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).

TGN38 (C-15) is also recommended for detection of precursor and mature TGN38 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for TGN38 siRNA (h): sc-44148, TGN38 siRNA (m): sc-44806, TGN38 shRNA Plasmid (h): sc-44148-SH, TGN38 shRNA Plasmid (m): sc-44806-SH, TGN38 shRNA (h) Lentiviral Particles: sc-44148-V and TGN38 shRNA (m) Lentiviral Particles: sc-44806-V.

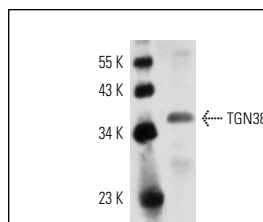
Molecular Weight of TGN38: 38 kDa.

Positive Controls: c4 whole cell lysate: sc-364186, mouse brain extract: sc-2253 or SK-N-MC cell lysate: sc-2237.

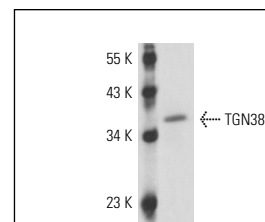
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



TGN38 (C-15): sc-27680. Western blot analysis of TGN38 expression in c4 whole cell lysate.



TGN38 (C-15): sc-27680. Western blot analysis of TGN38 expression in mouse brain tissue extract.

## SELECT PRODUCT CITATIONS

- Han, C., et al. 2009. Human SCAMP5, a novel secretory carrier membrane protein, facilitates calcium-triggered cytokine secretion by interaction with SNARE machinery. *J. Immunol.* 182: 2986-2996.
- El-Kadi, A.M., et al. 2010. The legs at odd angles (Loa) mutation in cytoplasmic dynein ameliorates mitochondrial function in SOD1G93A mouse model for motor neuron disease. *J. Biol. Chem.* 285: 18627-18639.
- Lee, Y.C., et al. 2010. Mitochondrial GLUT10 facilitates dehydroascorbic acid import and protects cells against oxidative stress: mechanistic insight into arterial tortuosity syndrome. *Hum. Mol. Genet.* 19: 3721-3733.

## 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 (A-5): sc-166224**, our highly recommended monoclonal alternatives to TGN38 (C-15).