

# golgin 245 (N-16): sc-102566

## BACKGROUND

Golgin 245 is also known as p230, GCP2, GOLG or Golgi autoantigen and is a 2,230 amino acid protein that is expressed as three isoforms. Golgin 245 is localized to the cytoplasm in cells and is a member of the golgin family, all of which are peripheral membrane proteins associated with the Golgi complex. Golgin 245 has a carboxyl-terminal GRIP domain, which attaches to the *trans*-Golgi network (TGN) and TGN-derived vesicles. It is thought that the interaction that takes place between golgin 245 and MACF1, which cross-links microtubules to the Actin cytoskeleton, allows proteins to be transported from the TGN to the cell periphery. Antibodies against golgin 245 are associated with two chronic disorders known as Sjögren's syndrome and Hepatitis B.

## REFERENCES

1. Fritzler, M.J., et al. 1995. Molecular characterization of golgin 245, a novel Golgi complex protein containing a granin signature. *J. Biol. Chem.* 270: 31262-31268.
2. Cowan, D.A., et al. 2002. Characterization of mouse tGolgin-1 (golgin 245/*trans*-Golgi p230/256 kD golgin) and its upregulation during oligodendrocyte development. *DNA Cell Biol.* 21: 505-517.
3. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 602509. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Kakinuma, T., et al. 2004. Interaction between p230 and MACF1 is associated with transport of a glycosyl phosphatidyl inositol-anchored protein from the Golgi to the cell periphery. *Exp. Cell Res.* 298: 388-398.
5. Hicks, S.W. and Machamer, C.E. 2005. Isoform-specific interaction of golgin 160 with the Golgi-associated protein PIST. *J. Biol. Chem.* 280: 28944-28951.
6. Yoshino, A., et al. 2005. tGolgin-1 (p230, golgin 245) modulates Shiga-toxin transport to the Golgi and Golgi motility towards the microtubule-organizing centre. *J. Cell Sci.* 118: 2279-2293.

## CHROMOSOMAL LOCATION

Genetic locus: GOLGA4 (human) mapping to 3p22.2.

## SOURCE

golgin 245 (N-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of golgin 245 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-102566 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.

## APPLICATIONS

golgin 245 (N-16) is recommended for detection of golgin 245 of 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); non cross-reactive with other golgin family members.

golgin 245 (N-16) is also recommended for detection of golgin 245 in additional species, including equine.

Suitable for use as control antibody for golgin 245 siRNA (h): sc-78158, golgin 245 shRNA Plasmid (h): sc-78158-SH and golgin 245 shRNA (h) Lentiviral Particles: sc-78158-V.

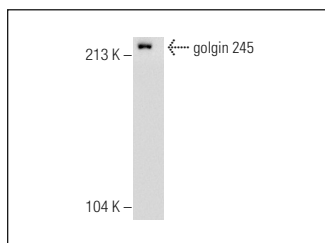
Molecular Weight of golgin 245: 261 kDa.

Positive Controls: T-47D cell lysate: sc-2293.

## 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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## DATA



golgin 245 (N-16): sc-102566. Western blot analysis of golgin 245 expression in T-47D whole cell lysate.

## RESEARCH USE

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

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Try **golgin 245 (G-7): sc-514775**, our highly recommended monoclonal alternative to golgin 245 (N-16).