

# golgin 160 (H-300): sc-292192

## BACKGROUND

The Golgi apparatus consists of a series of stacked, flattened membrane stacks called cisternae that are involved in the transport of lipids and proteins in the secretory pathway and are important for Golgi-microtubule interaction. Golgin 160, also known as GOLGA3 (golgin subfamily A member 3), MEA-2 or GCP170, is a 1,498 amino acid protein that localizes to both the cytoplasm and to the Golgi apparatus and contains a series of coiled-coil domains. Expressed in a variety of tissues, including heart, liver, testis, kidney, lung and salivary gland, golgin 160 functions as a homodimer that interacts with GOLGA7 and is thought to be involved in maintaining Golgi structure and may play a role in nuclear transport and Golgi apparatus localization. Multiple isoforms of golgin 160 exist due to alternative splicing events.

## REFERENCES

1. Fritzler, M.J., et al. 1993. Molecular characterization of two human autoantigens: unique cDNAs encoding 95- and 160 kD proteins of a putative family in the Golgi complex. *J. Exp. Med.* 178: 49-62.
2. Hicks, S.W. and Machamer, C.E. 2002. The NH<sub>2</sub>-terminal domain of golgin-160 contains both Golgi and nuclear targeting information. *J. Biol. Chem.* 277: 35833-35839.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 602581. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Ohta, E., et al. 2003. Identification and characterization of GCP16, a novel acylated Golgi protein that interacts with GCP170. *J. Biol. Chem.* 278: 51957-51967.
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. Maag, R.S., et al. 2005. Caspase-resistant golgin 160 disrupts apoptosis induced by secretory pathway stress and ligation of death receptors. *Mol. Biol. Cell* 16: 3019-3027.
7. Sbdio, J.I., et al. 2006. GCP60 preferentially interacts with a caspase-generated golgin 160 fragment. *J. Biol. Chem.* 281: 27924-27931.
8. Hicks, S.W., et al. 2006. Golgin 160 promotes cell surface expression of the β-1 adrenergic receptor. *Traffic* 7: 1666-1677.
9. Sbdio, J.I. and Machamer, C.E. 2007. Identification of a redox-sensitive cysteine in GCP60 that regulates its interaction with golgin 160. *J. Biol. Chem.* 282: 29874-29881.

## CHROMOSOMAL LOCATION

Genetic locus: GOLGA3 (human) mapping to 12q24.33; Golga3 (mouse) mapping to 5 F.

## SOURCE

golgin 160 (H-300) is a rabbit polyclonal antibody raised against amino acids 371-670 mapping within an internal region of golgin 160 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.

## APPLICATIONS

golgin 160 (H-300) is recommended for detection of golgin 160 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).

golgin 160 (H-300) is also recommended for detection of golgin 160 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for golgin 160 siRNA (h): sc-75160, golgin 160 siRNA (m): sc-75161, golgin 160 shRNA Plasmid (h): sc-75160-SH, golgin 160 shRNA Plasmid (m): sc-75161-SH, golgin 160 shRNA (h) Lentiviral Particles: sc-75160-V and golgin 160 shRNA (m) Lentiviral Particles: sc-75161-V.

Molecular Weight of golgin 160: 160 kDa.

## 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.

## 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.

## 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 **golgin 160 (C-8): sc-374596**, our highly recommended monoclonal alternative to golgin 160 (H-300).