

Giantin (H-49): sc-67168

BACKGROUND

GM130, a *cis*-Golgi matrix protein, interacts specifically with p115 and provides a membrane docking site. Both GM130 and p115 are involved in vesicle tethering to Golgi membranes. The protein p115 also binds p400, alternatively called Giantin. Giantin, the majority of whose mass projects into the cytoplasm, is involved in the docking of COPI vesicles via p115 to the Golgi membrane. Giantin, which also is known as macrogolgin or Golgi complex-associated protein, is involved in cross-bridge formation in the Golgi complex. Giantin, which can form a homodimer, is a single-pass type I membrane protein that is an antigen in Sjogren syndrome and in chronic rheumatoid arthritis.

REFERENCES

1. Sohda, M., et al. 1994. Molecular cloning and sequence analysis of a human 372-kDa protein localized in the Golgi complex. *Biochem. Biophys. Res. Commun.* 205: 1399-1408.
2. Seelig, H.P., et al. 1994. Molecular genetic analyses of a 376-kilodalton Golgi complex membrane protein (Giantin) *Mol. Cell. Biol.* 14: 2564-2576.

CHROMOSOMAL LOCATION

Genetic locus: GOLGB1 (human) mapping to 3q13.33; Golgb1 (mouse) mapping to 16 B3.

SOURCE

Giantin (H-49) is a rabbit polyclonal antibody raised against amino acids 2960-3008 mapping near the C-terminus of Giantin 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

Giantin (H-49) is recommended for detection of Giantin 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Giantin (H-49) is also recommended for detection of Giantin in additional species, including equine and porcine.

Suitable for use as control antibody for Giantin siRNA (h): sc-60685, Giantin siRNA (m): sc-60686, Giantin shRNA Plasmid (h): sc-60685-SH, Giantin shRNA Plasmid (m): sc-60686-SH, Giantin shRNA (h) Lentiviral Particles: sc-60685-V and Giantin shRNA (m) Lentiviral Particles: sc-60686-V.

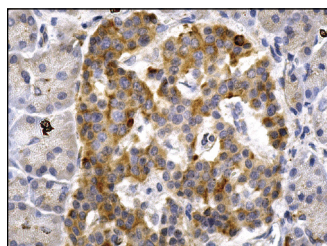
Molecular Weight of Giantin: 376 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Caki-1 cell lysate: sc-2224 or TT whole cell lysate: sc-364195.

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Giantin (H-49): sc-67168. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of islets of Langerhans.

SELECT PRODUCT CITATIONS

1. Messaed, C., et al. 2011. NLRP7, a nucleotide oligomerization domain-like receptor protein, is required for normal cytokine secretion and co-localizes with Golgi and the microtubule-organizing center. *J. Biol. Chem.* 286: 43313-43323.

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 or our catalog for detailed protocols and support products.


 MONOS
Satisfaction
Guaranteed

Try **Giantin (2388C3a): sc-81279**, our highly recommended monoclonal alternative to Giantin (H-49).