

golgin 97 (E-16): sc-74632

BACKGROUND

The GRIP family member, golgin 97, is a *trans*-Golgi network peripheral membrane protein with an extensive coiled-coil structure (67% α -helical content) and a C-terminal GRIP domain. Golgin 97 localizes exclusively on the cytoplasmic face of the Golgi and can form homodimers. Binding of golgin 97 to the Golgi membrane is mediated by the G protein family member, Arl1. Golgin 97 acts as an essential player to the cell in the form of a tethering molecule associating with tubulovesicular carriers during the trafficking from the *trans*-Golgi network to the recycling endosome and/or early endosome. During poxvirus infection, golgin 97 accumulates at the site of viral replication and is incorporated into virions. It associates with the insoluble fraction of the virus core protein, playing a significant role in virus replication and maturation of the virus membrane and core protein. Golgin 97 takes on a rod-like shape and, although it seemingly lacks a transmembrane domain, it protrudes from the surface of the virion envelope.

REFERENCES

1. Yoshino, A., et al. 2003. A role for GRIP domain proteins and/or their ligands in structure and function of the *trans* Golgi network. *J. Cell Sci.* 116: 4441-4454.
2. Yoshimura, S., et al. 2004. Dynamics of Golgi matrix proteins after the blockage of ER to Golgi transport. *J. Biochem.* 135: 201-216.
3. Lu, L., Tai, G. and Hong, W. 2004. Autoantigen golgin 97, an effector of Arl1 GTPase, participates in traffic from the endosome to the *trans*-Golgi network. *Mol. Biol. Cell* 15: 4426-4443.
4. Derby, M.C., et al. 2004. Mammalian GRIP domain proteins differ in their membrane binding properties and are recruited to distinct domains of the TGN. *J. Cell Sci.* 117: 5865-5874.
5. Luke, M.R., et al. 2005. The *trans*-Golgi network GRIP-domain proteins form α -helical homodimers. *Biochem. J.* 388: 835-841.

CHROMOSOMAL LOCATION

Genetic locus: GOLGA1 (human) mapping to 9q33.3; Golga1 (mouse) mapping to 2 B.

SOURCE

golgin 97 (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of golgin 97 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-74632 P, (100 μ g 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 97 (E-16) is recommended for detection of golgin 97 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

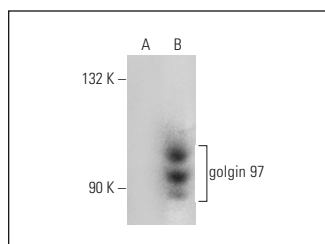
golgin 97 (E-16) is also recommended for detection of golgin 97 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for golgin 97 siRNA (h): sc-75162, golgin 97 siRNA (m): sc-75163, golgin 97 shRNA Plasmid (h): sc-75162-SH, golgin 97 shRNA Plasmid (m): sc-75163-SH, golgin 97 shRNA (h) Lentiviral Particles: sc-75162-V and golgin 97 shRNA (m) Lentiviral Particles: sc-75163-V.

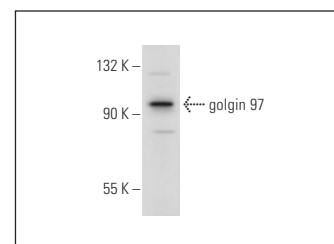
Molecular Weight of golgin 97: 97 kDa.

Positive Controls: golgin 97 (h): 293T Lysate: sc-175383, HeLa whole cell lysate: sc-2200 or mouse brain extract: sc-2253.

DATA



golgin 97 (E-16): sc-74632. Western blot analysis of golgin 97 expression in non-transfected: sc-117752 (A) and human golgin 97 transfected: sc-175383 (B) 293T whole cell lysates.



golgin 97 (E-16): sc-74632. Western blot analysis of golgin 97 expression in mouse brain tissue extract.

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.



Try **golgin 97 (CDFX): sc-59820**, our highly recommended monoclonal alternative to golgin 97 (E-16).