SANTA CRUZ BIOTECHNOLOGY, INC.

golgin 97 (CDF4): sc-73619

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

CHROMOSOMAL LOCATION

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

SOURCE

golgin 97 (CDF4) is a mouse monoclonal antibody raised against full length golgin 97 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

golgin 97 (CDF4) is available conjugated to either phycoerythrin (sc-73619 PE) or fluorescein (sc-73619 FITC), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

APPLICATIONS

golgin 97 (CDF4) is recommended for detection of golgin 97 of broad species 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), flow cytometry (1 µg per 1 x 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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: HCT-116 whole cell lysate: sc-364175, HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

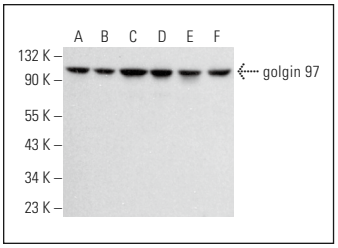
STORAGE

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

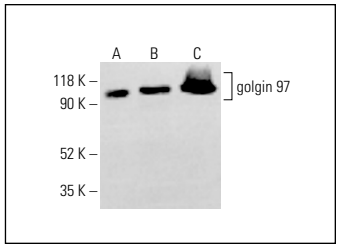
RESEARCH USE

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

DATA



golgin 97 (CDF4): sc-73619. Western blot analysis of golgin 97 expression in T-47D (**A**), Hep G2 (**B**), SW480 (**C**), MCF7 (**D**), HeLa (**E**) and U-87 MG (**F**) whole cell lysates.



golgin 97 (CDF4): sc-73619. Western blot analysis of golgin 97 expression in HeLa (**A**), K-562 (**B**) and HCT-116 (**C**) whole cell lysates. Detection reagent used: m-IgG Fc BP-HRP: sc-525409.

SELECT PRODUCT CITATIONS

1. Yang, G.Z., et al. 2012. Huntingtin associated protein 1 regulates trafficking of the amyloid precursor protein and modulates amyloid β levels in neurons. J. Neurochem. 122: 1010-1022.
2. Bannoud, N., et al. 2018. Cation-dependent mannose-6-phosphate receptor expression and distribution are influenced by estradiol in MCF7 breast cancer cells. PLoS ONE 13: e0201844.
3. Katayama, K., et al. 2018. Giantin is required for coordinated production of aggrecan, link protein and type XI collagen during chondrogenesis. Biochem. Biophys. Res. Commun. 499: 459-465.
4. Indellicato, R., et al. 2019. Total loss of GM3 synthase activity by a normally processed enzyme in a novel variant and in all ST3GAL5 variants reported to cause a distinct congenital disorder of glycosylation. Glycobiology 29: 229-241.
5. Perez-Siles, G., et al. 2020. Modelling the pathogenesis of X-linked distal hereditary motor neuropathy using patient-derived iPSCs. Dis. Model. Mech. 13: dmm041541.
6. Lee, C.Y., et al. 2020. A spontaneous missense mutation in the chromodomain helicase DNA binding protein 8 (CHD8) gene: a novel association with congenital myasthenic syndrome. Neuropathol. Appl. Neurobiol. 46: 588-601.
7. Hadjisavva, R., et al. 2022. Adherens junctions stimulate and spatially guide integrin activation and extracellular matrix deposition. Cell Rep. 40: 111091.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.