SANTA CRUZ BIOTECHNOLOGY, INC.

GRASP65 (H-230): sc-30093



BACKGROUND

The Golgi apparatus is a highly complex organelle comprised of a stack of cisternal membranes on the secretory pathway from the ER to the cell surface. The structure is maintained by an exoskeleton or Golgi matrix constructed from a family of coiled-coil protein, the golgins and other peripheral membrane components such as GRASP55 and GRASP65. GRASP55 (Golgi reassembly stacking protien or p59) is a component of the Golgi stacking machinery. GRASP55 is highly homologous to GRASP65 and contains two PDZ domains. GRASP55 is myristoylated and palmitoylated. Unlike GRASP65, GRASP55 does not have detectable binding with the vesicle docking protein GM130 and is located on the medial-Golgi rather than cis-Golgi. Both GRASP55 and GRASP65 function in the stacking of Golgi cisternae. The novel coiled-coil protein golgin 45 interacts with GRASP55 and the GTP form of Rab 2, suggesting that GRASP55 and golgin 45 form a Rab 2 effector complex on medial-Golgi essential for normal protein transport and Golgi structure. ERK2 directly phosphorylates GRASP55, which is phosphorylated in mitotic cells, suggesting that mitogen-activated protein kinase kinase (MKK)/ERK pathway phosphorylates the Golgi during mitosis.

CHROMOSOMAL LOCATION

Genetic locus: GORASP1 (human) mapping to 3p22.2; Gorasp1 (mouse) mapping to 9 F4.

SOURCE

GRASP65 (H-230) is a rabbit polyclonal antibody raised against amino acids 211-440 mapping at the C-terminus of GRASP65 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.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

GRASP65 (H-230) is recommended for detection of GRASP65 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).

Suitable for use as control antibody for GRASP65 siRNA (h): sc-41228, GRASP65 siRNA (m): sc-41229, GRASP65 shRNA Plasmid (h): sc-41228-SH, GRASP65 shRNA Plasmid (m): sc-41229-SH, GRASP65 shRNA (h) Lentiviral Particles: sc-41228-V and GRASP65 shRNA (m) Lentiviral Particles: sc-41229-V.

Molecular Weight of GRASP65: 65 kDa.

Positive Controls: GRASP65 (h): 293T Lysate: sc-117395, HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

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.

DATA



GRASP65 (H-230): sc-30093. Western blot analysis of GRASP65 expression in non-transfected: sc-117752 (**A**) and human GRASP65 transfected: sc-117395 (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

 Khan, M.M., et al. 2012. Protein disulfide isomerase-mediated disulfide bonds regulate the gelatinolytic activity and secretion of matrix metalloproteinase-9. Exp. Cell Res. 318: 904-914.

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 **GRASP65 (D-12): sc-374423** or **GRASP65 (G-9): sc-365412**, our highly recommended monoclonal alternatives to GRASP65 (H-230).