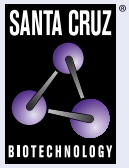
SANTA CRUZ BIOTECHNOLOGY, INC.

GMAP-210 (E-2): sc-515208



The Power to Question

BACKGROUND

Golgi microtubule-associated protein 210 (GMAP-210), also referred to as CEV14, Trip11 or Trip230, is a peripheral Golgi protein that localizes to the *cis*-Golgi network. GMAP-210 is a 1,978 amino acid coiled-coil member of the golgin family of proteins. Microtubule ends bind to GMAP-210 which functions to link the *cis*-Golgi network to the minus ends of centrosome-nucleated microtubules. This interaction may be essential for the proper morphology and structural maintenance of the Golgi apparatus. GMAP-210 also associates with thyroid hormone receptor-β. Overexpression of GMAP-210 disrupts the micro-tubule network and causes a significant enlargement and fragmentation of the Golgi apparatus; it also blocks antero-grade and retrograde transport between the ER and the Golgi apparatus.

REFERENCES

1. Infante, C., et al. 1999. GMAP-210, *cis*-Golgi network-associated protein, is a minus end microtubule-binding protein. J. Cell Biol. 145: 83-98.
2. Ramos-Morales, F., et al. 2001. Two splice variants of Golgi-microtubule-associated protein of 210 kDa (GMAP-210) differ in their binding to the *cis*-Golgi network. Biochem. J. 357: 699-708.
3. Pernet-Gallay, K., et al. 2002. The overexpression of GMAP-210 blocks anterograde and retro-grade transport between the ER and the Golgi apparatus. Traffic 3: 822-832.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604505. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Gillingham, A.K., et al. 2004. The GTPase Arf1p and the ER to Golgi cargo receptor Erv14p cooperate to recruit the golgin Rud3p to the *cis*-Golgi. J. Cell Biol. 167: 281-292.
6. Linstedt, A.D. 2004. Positioning the Golgi apparatus. Cell 118: 271-272.

CHROMOSOMAL LOCATION

Genetic locus: TRIP11 (human) mapping to 14q32.12; Trip11 (mouse) mapping to 12 E.

SOURCE

GMAP-210 (E-2) is a mouse monoclonal antibody raised against amino acids 1680-1819 mapping within an internal region of GMAP-210 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.

GMAP-210 (E-2) is available conjugated to agarose (sc-515208 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515208 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515208 PE), fluorescein (sc-515208 FITC), Alexa Fluor® 488 (sc-515208 AF488), Alexa Fluor® 546 (sc-515208 AF546), Alexa Fluor® 594 (sc-515208 AF594) or Alexa Fluor® 647 (sc-515208 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515208 AF680) or Alexa Fluor® 790 (sc-515208 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

GMAP-210 (E-2) is recommended for detection of GMAP-210 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for GMAP-210 siRNA (h): sc-62387, GMAP-210 shRNA Plasmid (h): sc-62387-SH and GMAP-210 shRNA (h) Lentiviral Particles: sc-62387-V.

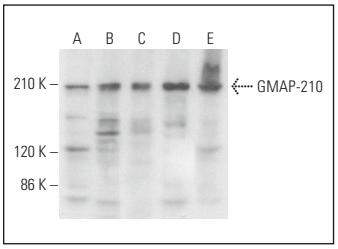
Molecular Weight of GMAP-210: 210 kDa.

Positive Controls: 3T3-L1 cell lysate: sc-2243, BT-20 cell lysate: sc-2223 or Jurkat whole cell lysate: sc-2204.

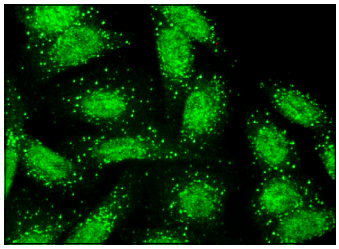
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



GMAP-210 (E-2): sc-515208. Western blot analysis of GMAP-210 expression in Jurkat (**A**), BT-20 (**B**), 3T3-L1 (**C**), C2C12 (**D**) and A-10 (**E**) whole cell lysates.



GMAP-210 (E-2): sc-515208. Immunofluorescence staining of formalin-fixed SW480 cells showing nuclear and cytoplasmic vesicles localization.

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 for detailed protocols and support products.

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