SANTA CRUZ BIOTECHNOLOGY, INC.

COG6 (E-20): sc-84070

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The structure and function of the Golgi apparatus is controlled by a number of multi-protein complexes that are involved in glycosylation reactions and vesicular transport. The conserved oligomeric Golgi (COG) complex consists of three subcomplexes, termed LDLC, SEC34 and GTC (Golgi transport complex), all of which contain proteins necessary for proper Golgi operation. COG6 (conserved oligomeric Golgi complex component 6), also known as COD2, is a 657 amino acid component of the COG complex. Expressed in brain and ovary, COG6 is a peripheral membrane protein that is essential for the proper function of the Golgi, namely maintaining Golgi structure and mediating vesicle docking and fusion. Three isoforms of COG6 exist due to alternative splicing events.

REFERENCES

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2. Whyte, J.R. and Munro, S. 2001. The Sec34/35 Golgi transport complex is related to the exocyst, defining a family of complexes involved in multiple steps of membrane traffic. Dev. Cell 1: 527-537.
3. Loh, E. and Hong, W. 2002. Sec34 is implicated in traffic from the endoplasmic reticulum to the Golgi and exists in a complex with GTC-90 and ldlBp. J. Biol. Chem. 277: 21955-21961.
4. Ungar, D., Oka, T., Brittle, E.E., Vasile, E., Lupashin, V.V., Chatterton, J.E., Heuser, J.E., Krieger, M. and Waters, M.G. 2002. Characterization of a mammalian Golgi-localized protein complex, COG, that is required for normal Golgi morphology and function. J. Cell Biol. 157: 405-415.
5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606977. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
6. Loh, E. and Hong, W. 2004. The binary interacting network of the conserved oligomeric Golgi tethering complex. J. Biol. Chem. 279: 24640-24648.

CHROMOSOMAL LOCATION

Genetic locus: COG6 (human) mapping to 13q14.11; Cog6 (mouse) mapping to 3 C.

SOURCE

COG6 (E-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of COG6 of human origin.

STORAGE

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

PROTOCOLS

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84070 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

COG6 (E-20) is recommended for detection of COG6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

COG6 (E-20) is also recommended for detection of COG6 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for COG6 siRNA (h): sc-105224, COG6 siRNA (m): sc-142454, COG6 shRNA Plasmid (h): sc-105224-SH, COG6 shRNA Plasmid (m): sc-142454-SH, COG6 shRNA (h) Lentiviral Particles: sc-105224-V and COG6 shRNA (m) Lentiviral Particles: sc-142454-V.

Molecular Weight of COG6: 73 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201.

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) 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.

RESEARCH USE

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