

COG2 (GA99): sc-130444

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 GTT (Golgi transport complex), all of which contain proteins necessary for proper Golgi operation. COG2 (conserved oligomeric Golgi complex subunit 2), also known as LDLC, is a 730 amino acid component of the COG complex. Localized to the cytoplasmic side of the Golgi apparatus, COG2 is required for proper Golgi morphology and function, specifically playing a role in Golgi ribbon formation and vesicular transport. Abnormal COG2 function may cause cell death, suggesting that COG2 is an important factor in cell viability.

REFERENCES

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4. Ungar, D., et al. 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.
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7. Ungar, D., et al. 2006. Retrograde transport on the COG railway. *Trends Cell Biol.* 16: 113-120.
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CHROMOSOMAL LOCATION

Genetic locus: COG2 (human) mapping to 1q42.2.

SOURCE

COG2 (GA99) is a mouse monoclonal antibody raised against recombinant COG2 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

COG2 (GA99) is recommended for detection of COG2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for COG2 siRNA (h): sc-88101, COG2 shRNA Plasmid (h): sc-88101-SH and COG2 shRNA (h) Lentiviral Particles: sc-88101-V.

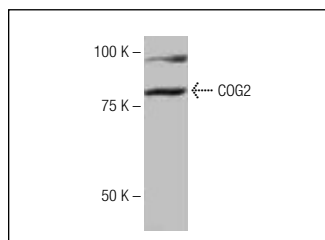
Molecular Weight of COG2: 83 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409.

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, 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).

DATA



COG2 (GA99): sc-130444. Western blot analysis of COG2 expression in IMR-32 whole cell lysate.

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 for detailed protocols and support products.