

Product Information

Anti-COG4

produced in rabbit, affinity isolated antibody

Catalog Number **SAB4200568**

Product Description

Anti-COG4 is produced in rabbit using as immunogen a peptide corresponding to an internal region of human COG4 (GeneID: 25839), conjugated to KLH. The corresponding sequence is identical in mouse, rat, dog and monkey COG4. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-COG4 recognizes human and rat COG4. The antibody may be used in various immunochemical techniques including immunoblotting (~84 kDa) and immunofluorescence. Detection of the COG4 band by immunoblotting is specifically inhibited by the immunizing peptide.

Conserved oligomeric Golgi complex 4 (COG4), also known as COD1, is a member of the conserved oligomeric Golgi (COG) complex. COG complex is an evolutionarily conserved multi-subunit protein complex that regulates membrane trafficking and maintenance of Golgi glycosylation machinery in eukaryotic cells. COG complex is composed of eight distinct subunits organized in two heterotrimeric groups, Cog2-Cog3-Cog4 and Cog5-Cog6-Cog7, which are linked by the dimeric group formed by Cog1 and Cog8.¹⁻³ COG4 is needed for normal Golgi function. COG4 is implicated in Golgi SNARE pairing and Golgi-to-ER retrograde transport via its interaction with the SM protein Sly1. Defects in the COG4 gene may be a cause of congenital disorder of glycosylation type IIj (CDG2J).⁴⁻⁵

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 2.5-5.0 µg/mL is recommended using whole extracts of rat liver.

Immunofluorescence: a working concentration of 1-2 µg/mL is recommended using human HeLa cells.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test. Exposure to sensitive film is recommended.

References

1. Quental, R., et al., *BMC Evol. Biol.*, **10**:212 (2010).
2. Suvorova, E.S., et al., *J. Biol. Chem.*, **276**, 22810-22818 (2001).
3. Pokrovskaya, I.D., et al., *Glycobiology*, **21**, 1554-1569 (2011).
4. Laufman, O., et al., *EMBO J.*, **28**, 2006-2017 (2009).
5. Richardson, B.C., et al., *Proc. Natl. Acad. Sci. USA*, **106**, 13329-13334 (2009).

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