

## Product Information

### Anti- COG1 (C-terminal)

produced in rabbit, affinity isolated antibody

Catalog Number **SAB4200424**

#### Product Description

Anti-COG1 (C-terminal) is produced in rabbit using as immunogen a peptide corresponding to the C-terminal region of human COG1 (GenelD: 9382), conjugated to KLH. The corresponding sequence is identical in mouse, rat and monkey COG1. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-COG1 (C-terminal) recognizes human and mouse COG1. The antibody may be used in various immunochemical techniques including immunoblotting (~110 kDa) and immunofluorescence. Detection of the COG1 band by immunoblotting is specifically inhibited by the immunizing peptide.

Conserved oligomeric Golgi complex 1 (COG1), also known as LDLB and CDG2G, 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.<sup>1-3</sup>

COG1 is needed for normal Golgi function. It is thought to be required for steps in the normal medial and trans Golgi-associated processing of glycoconjugates and plays a role in the organization of the Golgi-localized complex. Mutations in COG1 in humans cause novel types of congenital disorders of glycosylation.<sup>4</sup>

#### 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 mouse LA-4 cells.

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.

#### 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. Smith, R.D., and Lupashin, V.V., *Carbohydr. Res.*, **343**, 2024-2031 (2008).

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