

Product Information

Monoclonal Anti-GOLPH3 antibody produced in mouse clone GOL3-1, purified from hybridoma cell culture

Catalog Number **SAB4200660**

Product Description

Monoclonal Anti-GOLPH3 (mouse IgG1 isotype) is derived from the hybridoma GOL3-1 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a synthetic peptide corresponding to a sequence at the N-terminal region of human Golph3 (GeneID: 64083), conjugated to KLH. The corresponding sequence is identical in mouse, rat, monkey and bovine. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2. The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-GOLPH3 recognizes human, mouse and rat Golph3. The antibody may be used in various immunochemical techniques including immunoblotting (~34 kDa), immunoprecipitation and immunofluorescence. Detection of the Golph3 band by immunoblotting is specifically inhibited by the immunizing peptide.

GOLPH3 (Golgi phosphoprotein 3), also known as Coat protein GPP34, is a peripheral membrane protein of the Golgi stack that localizes to the trans-Golgi network. GOLPH3 is conserved from yeast to human and has a role in Golgi trafficking and morphology. It interacts with the unconventional myosin MYO18A, linking Golgi membranes to the actin cytoskeleton.¹⁻³ GOLPH3 is also required for Golgi function.² This gene was described as an oncogene that is commonly amplified in human cancer and in cancer cell lines.³⁻⁵ Furthermore, its overexpression was correlated with hyperactivation of mTOR signaling, in human cancer cells.³⁻⁴

Reagent

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

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 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, or storage in “frost-free” freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 2.5-5 µg/mL is recommended using whole extracts of rat PC-12 cells.

Immunoprecipitation: a working amount of 5-10 µg is recommended using lysates of human HeLa cells.

Immunofluorescence: a working concentration of 2.5-5 µg/mL is recommended using mouse 3T3 cells.

Note:

In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

References

1. Bell, A.W., et al., *J. Biol. Chem.*, **276**, 5152-5165 (2001).
2. Dippold, H.C., et al., *Cell*, **139**, 337-351 (2009).
3. Scott, K.L., et al., *Nature*, **459**, 1085-1090 (2009).
4. Abraham, R.T., *Pigment Cell Melanoma Res.*, **22**, 378-379 (2009).
5. Ma, Y., et al., *Virchows Arch.*, **464**, 443-452 (2014)

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