

Product Information

Monoclonal Anti-Alpha4, clone 5F6

produced in mouse, purified immunoglobulin

Catalog Number **SAB4200239**

Product Description

Monoclonal Anti-Alpha4 (mouse IgG1 isotype) is derived from the hybridoma 5F6 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a mouse Alpha4 (GeneID: 18518) fusion protein. The corresponding sequence shares 80% homology with human Alpha4 (GeneID: 3476). 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-Alpha4 recognizes human and mouse Alpha4. The antibody may be used in several immunochemical techniques including immunoblotting (~40 kDa).

The phosphoprotein Alpha4, also known as Immunoglobulin-binding protein 1 (IGBP1), is a regulatory subunit of PP2A-type phosphatases and a key component of the rapamycin-sensitive signaling pathway. It associates with the PP2A- α and PP2A- β catalytic subunits (PP2Ac), and with PP4 and PP6. Alpha4 also interacts with the microtubule-associated proteins MID1 and MID2, which are linked to the congenital disorder Opitz syndrome (OS). MID1 is an E3 ubiquitin ligase responsible for targeting PP2Ac for proteasome degradation. Alpha4 serves as an adaptor protein that provides a binding platform for both PP2Ac and MID1, and plays an important role in the regulation of PP2Ac ubiquitination.¹⁻⁴

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 at -20 °C 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 dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 1-2 µg/mL is recommended using whole extracts of mouse 3T3 or human HeLa cells.

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

References

1. Onda, M., et al., *Genomics*, **46**, 373-378 (1997).
2. Chen, J., *Biochem. Biophys. Res. Commun.*, **247**, 827-832 (1998).
3. Short, K. M., et al., *BMC Cell Biol.*, **3**, 1 (2002).
4. McConnell, J.L., et al., *Biochemistry*, **49**, 1713-1718 (2010).

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