3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

Monoclonal Anti-SORBS1, clone SORBS-437
produced in mouse, purified immunoglobulin

Catalog Number **SAB4200599**

Product Description

Monoclonal Anti-SORBS1 (mouse IgG1 isotype) is derived from the hybridoma SORBS-437 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a synthetic peptide corresponding to an internal sequence of human SORBS1 (GeneID: 10580). 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-SORBS1 recognizes human, rat and mouse SORBS1. The product may be used in several immunochemical techniques including immunoblotting (~ 95 kDa) and flow cytometry. Detection of the SORBS1 band by immunoblotting is specifically inhibited by the immunizing peptide.

The human *SORBS1* gene (Sorbin and SH3 domain containing-1; also called *CAP*, *SH3P12*, or Ponsin) encodes an adaptor protein which modulates adhesion-mediated signaling events that lead to cell migration, [1] interacts with numerous molecules involved in the regulation of cell-cell and cell-matrix adhesion, actin cytoskeleton organization and growth factor receptor downstream signaling. Human *SORBS1* might be considered as one of the genes with the highest number of splicing variants.[2] Its activity is related *inter alia* to its phosphorylation by Src and Abl, resulting in cell spreading.[3] Furthermore, SORBS1 was found to act as insulin-signaling molecule, by forming a complex with the oncoprotein Cbl.[1] It is mainly expressed in insulin-sensitive tissues such as adipose tissue, liver, and skeletal muscle. It was therefore suggested to serve as a protective factor for both obesity and diabetes, and also implied to play an important role in the pathogenesis of human disorders with insulin resistance.[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 extended storage, freeze at –20 ^{0}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 0.25-0.5 µg/mL is recommended using Caco-2 total cell extracts.

Flow Cytometry: a working dilution of 10-20 µg/test is recommended using 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. Zhang, M., et al., *EMBO J.,* **25,** 5284-5293 (2006).
2. Tomasovic, A., et al., *J. Mol. Biochem.,* **1**, 171-182 (2012).
3. Fernow, I., et al., *BMC. Cell. Biol.,* **10,** 80-93 (2009).
4. Lin, W.H., et al., *Hum. Mol. Genet.,* **17**, 1753-1760 (2001).

GG,RC,PHC 07/13-1