

## Product Information

# Anti-SORBS3 Antibody, Mouse Monoclonal

Clone SORB132, Purified from Hybridoma Cell Culture

**SAB4200123**

## Product Description

Monoclonal Anti-SORBS3 (mouse IgG1 isotype) is derived from the hybridoma SORB132 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a synthetic peptide corresponding to a fragment of human SORBS3 (GeneID 10174), conjugated to KLH. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents (Cat. No. ISO2). The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-SORBS3 recognizes human and monkey SORBS3. The product may be used in several immunochemical techniques including immunoblotting (37 kDa). Staining of the SORBS3 band in immunoblotting is specifically inhibited with the immunizing peptide.

SORBS3 (also known as vinexin) belongs to a family of adaptor proteins.<sup>1</sup> All the family members share a Sorbin Homology (SoHo) domain in the N-terminal region, which has been shown to bind the lipid raft-associated protein flotillin1, and three Src Homology 3 (SH3) domains in the C-terminal region, which allows the binding of specific signaling and cytoskeletal molecules, including vinculin. To date, three different isoforms of SORBS3 ( $\alpha$ ,  $\beta$ , and  $\gamma$ ) have been characterized.<sup>2,3</sup> Isoform  $\alpha$  and  $\beta$  contain three SH3 domains while the  $\beta$  isoform does not include the N-terminal SoHo domain.<sup>2</sup> The  $\gamma$  isoform of vinexin has been characterized in mouse fetal gonads. It differs from the  $\alpha$  isoform in a few amino acids that are missing from the N-terminal region.<sup>3</sup> The  $\gamma$  isoform was found to promote upregulation of actin stress fiber formation.<sup>4</sup> The  $\beta$  isoform is thought to play a role in cell spreading and enhancement of the activation of JNK/SAPK in response to EGF stimulation by using its third SH3 domain.<sup>5</sup> SORBS3/Vinexin  $\beta$  is ubiquitously expressed but vinexin  $\alpha$  and  $\gamma$  show a tissue- or stage-specific expression.<sup>2-3</sup>

## 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.

## Storage/Stability

Store at  $-20^{\circ}\text{C}$ . For continuous use, store at  $2-8^{\circ}\text{C}$  for up to one month. For extended storage, freeze at  $-20^{\circ}\text{C}$  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 antibody concentration of 2-4  $\mu\text{g/mL}$  is recommended using A431 total cell extracts.

**Note:** In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

## References

1. Kioka, N., et al., *Cell. Struct. Funct.*, **27**: 1-7 (2002).
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3. Matsuyama, M., et al., *Genes Cells*, **10**: 421-434 (2005).
4. Takahashi, H., et al., *Biochem. Biophys. Res. Commun.*, **336**: 239-246 (2005).
5. Akamatsu, M., et al., *J. Biol. Chem.*, **274**: 35933-35937 (1999).
6. Kawauchi, T., et al., *Mech. Dev.*, **106**: 147-150 (2001).

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