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Product Information

Monoclonal Anti-SFRP1 antibody, clone FRP148
produced in mouse, purified from hybridoma cell culture

Catalog Number **SAB4200630**

Product Description

Monoclonal Anti-SFRP1 (mouse IgG2a isotype) is derived from the hybridoma FRP148 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 SFRP1 (GeneID: 6422), conjugated to KLH. The corresponding sequence differs by a single amino acid in rat and mouse SFRP1. 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-SFRP1 recognizes human SFRP1. The product may be used in several immunochemical techniques including immunoblotting (~35 kDa) and Flow cytometry. Detection of the SFRP1 band by immunoblotting is specifically inhibited by the immunizing peptide.

SFRP1 (secreted frizzled-related protein 1) also known as FRP1 or SARP2 (Secreted Apoptosis-Related Protein 2), is a member of sFRPs family of Wnt signaling antagonists. SFRP1 contains a frizzled (Fz)–related cysteine-rich domain that can bind to both Wnt proteins and Fz. SFRP1 directly prevents Wnt/receptor activation, hence playing a role as a tumor suppressor. On the other hand, SFRP1 has Wnt-independent activities indicating that SFRP1 may sometimes promote tumor growth.[1-3] SFRP1 expression has been observed in a large proportion of invasive carcinomas, such as breast, gastric, cervical, hepatocellular and prostate. Elevated levels of SFRP1 have also been reported in retinas of patients affected by retinitis pigmentosa.[2] In addition, several reports link SFRP1 to Wnt's role in maintaining bone homeostasis, suggesting that inhibition of SFRP1 may be a potential target for stimulating bone formation via Wnt signaling.[3-4]

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 Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

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 0.025-0.05 µg/mL is recommended using whole extracts of WI-38 cells.

Flow Cytometry: a working dilution of 10-20 µg/test is recommended using WI-38 cells.

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

References

1. Bovolenta, P., et al., *J. Cell Sci.*, **121**, 737-746 (2008).
2. Rubin, J.S., et al., *Front. Biosci.*, **11**, 2093-2105 (2006).
3. Yao, W., et al., *J. Bone Miner. Res.*, **25**, 190–199 (2010).
4. Fei, Y., and Hurley, M.M., *J. Cell Physiol.*, **227**, 3539-3545 (2012).

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