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

Anti-AXIN2 antibody, Mouse monoclonal
clone AX13, purified from hybridoma cell culture

Catalog Number **SAB4200564**

Product Description

Anti-AXIN2 (mouse IgG1 isotype) is derived from the hybridoma AX13 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 AXIN2 (GeneID: 8313). 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.

Anti-AXIN2 recognizes human AXIN2. The product may be used in several immunochemical techniques including immunoblotting (~ 100 kDa).
Detection of the AXIN2 band by immunoblotting is specifically inhibited by the immunizing peptide.

AXIN2, also named Axil/conductin, is a negative regulator of Wnt signaling and a putative tumor suppressor gene located on chromosome band 17q24.[1] It works as a scaffold protein that takes part in a multiprotein complex that facilitates β-catenin phosphorylation as well as its degradation by the proteasome complex. In addition, AXIN2 is itself activated by Wnt/T-cell factor signaling, resulting in a negative-feedback loop, which regulates the duration and intensity of Wnt/T-cell factor activation.[2] Due to its function, AXIN2 could be suspected to play a role in human cancer pathogenesis. Indeed, mutations in *AXIN2* have been described in familial tooth agenesis, colorectal carcinomas, hepatocellular carcinomas, hepatoblastomas, melanomas, gastric cancer, and ovarian endometrioid adenocarcinomas.[3] Furthermore, Axin2 was found to be an essential regulator of remyelination and thus has been indicated as a possible pharmacological checkpoint in this process.[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

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 0.5-1.0 µg/mL is recommended using total cell extracts of HEK-293T cells overexpressing AXIN2.

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

References

1. Behrens, J., and Lustig, B., *J. Dev. Biol*., **48**, 477-487 (2004).
2. Jho, E.H., et al., *Mol. Cell. Biol.,* **22**, 1172-1183 (2002).
3. Pedace, L., et al., *Genes Chromosomes Cancer*, **50**, 370–373 (2011).
4. Fancy, S.P., *Nat. Neurosci.,* **14**, 1009-1016 (2011).

RC,GG,RC,PHC 04/21-1