SANTA CRUZ BIOTECHNOLOGY, INC.

SARP3 (H-6): sc-374397



BACKGROUND

The frizzled gene was originally identified in *Drosophila melanogaster* and was shown to be involved in the development of tissue polarity. The mammalian homolog of frizzled, as well as several mammalian frizzled-related proteins, FRP-1 (also designated SARP2), FRP-2 (also designated SARP1), FRP-3 and SARP3 (also designated FRP-5) have been identified. Frizzled is a transmembrane protein that functions as a receptor for Wnt. The frizzled related proteins FRP-1, FRP-2, FRP-3 and SARP3 are secreted proteins that contain regions of homology to the cysteine-rich ligand-binding domain of frizzled. The FRPs/SARPs have also been shown to be involved in the Wnt signaling pathway by regulating the intracellular levels of β -catenin.

REFERENCES

- Wang, Y., et al. 1996. A large family of putative transmembrane receptors homologous to the product of the *Drosophila* tissue polarity gene fizzled. J. Biol. Chem. 271: 4468-4476.
- Yang-Snyder, J., et al. 1996. A frizzled homolog functions in a vertebrate Wnt signaling pathway. Curr. Biol. 6: 1302-1306.
- Rattner, A., et al. 1997. A family of secreted proteins contains homology to the cysteine-rich ligand-binding domain of frizzled receptors. Proc. Natl. Acad. Sci. USA 94: 2859-2863.

CHROMOSOMAL LOCATION

Genetic locus: SFRP5 (human) mapping to 10q24.2; Sfrp5 (mouse) mapping to 19 C3.

SOURCE

SARP3 (H-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 21-59 near the N-terminus of SARP3 of human origin.

PRODUCT

Each vial contains 200 μg lgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SARP3 (H-6) is available conjugated to agarose (sc-374397 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374397 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374397 PE), fluorescein (sc-374397 FITC), Alexa Fluor® 488 (sc-374397 AF488), Alexa Fluor® 546 (sc-374397 AF546), Alexa Fluor® 594 (sc-374397 AF594) or Alexa Fluor® 647 (sc-374397 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374397 AF680) or Alexa Fluor® 790 (sc-374397 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-374397 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

SARP3 (H-6) is recommended for detection of SARP3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SARP3 (H-6) is also recommended for detection of SARP3 in additional species, including bovine.

Suitable for use as control antibody for SARP3 siRNA (h): sc-40004, SARP3 siRNA (m): sc-40005, SARP3 shRNA Plasmid (h): sc-40004-SH, SARP3 shRNA Plasmid (m): sc-40005-SH, SARP3 shRNA (h) Lentiviral Particles: sc-40004-V and SARP3 shRNA (m) Lentiviral Particles: sc-40005-V.

Molecular Weight of SARP3: 40 kDa.

Positive Controls: SARP3 (h): 293T Lysate: sc-116119.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG א BP-HRP: sc-516102 or m-IgG א BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG א BP-FITC: sc-516140 or m-IgG א BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.





SARP3 (H-6): sc-374397. Western blot analysis of SARP3 expression in non-transfected: sc-117752 (A) and human SARP3 transfected: sc-116119 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

 Xu, Q., et al. 2019. Secreted frizzled-related protein 5 suppresses aggressive phenotype and reverses docetaxel resistance in prostate cancer. J. Investig. Med. 67: 1009-1017.

RESEARCH USE

For research use only, not for use in diagnostic procedures.