

Sororin (S-17): sc-49323

BACKGROUND

Sororin, also designated cell division cycle-associated protein 5 (CDCA5) or p35, functions as a regulator of sister chromatid cohesion during mitosis. It interacts with the APC/C complex and is found in a complex consisting of cohesion components SCC-112, MC1L1, SMC3L1, RAD21 and APRIN. The deduced human and mouse Sororin proteins consist of 252 and 264 amino acid residues respectively, and both contain a KEN box for APC-dependent ubiquitination. Research demonstrates a punctated nuclear distribution of Sororin during interphase and a diffuse distribution throughout the cell during mitosis. There is no apparent concentration of Sororin on chromatin in mitotic cells and Sororin levels decrease in synchronized HeLa cells during interphase. The Sororin gene maps to chromosome 11q13.1.

REFERENCES

1. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 609374. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
2. Rankin, S. 2005. Sororin, the cell cycle and sister chromatid cohesion. *Cell Cycle* 4: 1039-1042.
3. Rankin, S., Ayad, N.G. and Kirschner, M.W. 2005. Sororin, a substrate of the anaphase-promoting complex, is required for sister chromatid cohesion in vertebrates. *Mol. Cell* 18: 185-200.
4. Hisanaga, S. 2005. Phosphorylation of FTDP-17 mutant Tau by cyclin-dependent kinase 5 complexed with p35, p25 or p39. *J. Biol. Chem.* 280: 31522-31529.
5. Kim, E., Chen, F., Wang, C.C. and Harrison, L.E. 2006. CDK5 is a novel regulatory protein in PPAR γ ligand-induced antiproliferation. *Int. J. Oncol.* 28: 191-194.
6. Strock, C.J., Park, J.I., Nakakura, E.K., Bova, G.S., Isaacs J.T., Ballm D.W. and Nelkin, B.D. 2006. Cyclin-dependent kinase 5 activity controls cell motility and metastatic potential of prostate cancer cells. *Cancer Res.* 66: 7509-7555.

CHROMOSOMAL LOCATION

Genetic locus: CDCA5 (human) mapping to 11q13.1; Cdca5 (mouse) mapping to 19 A.

SOURCE

Sororin (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Sororin of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-49323 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Sororin (S-17) is recommended for detection of Sororin (CDCA5) of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Sororin (S-17) is also recommended for detection of Sororin (CDCA5) in additional species, including canine.

Suitable for use as control antibody for Sororin siRNA (h): sc-61599, Sororin siRNA (m): sc-61600, Sororin shRNA Plasmid (h): sc-61599-SH, Sororin shRNA Plasmid (m): sc-61600-SH, Sororin shRNA (h) Lentiviral Particles: sc-61599-V and Sororin shRNA (m) Lentiviral Particles: sc-61600-V.

Molecular Weight of Sororin: 27.6 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


 MONOS
 Satisfaction
 Guaranteed

Try **Sororin (B-9): sc-365319** or **Sororin (D-11): sc-390900**, our highly recommended monoclonal alternatives to Sororin (S-17).