

Sororin (M-190): sc-67248

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: 7509-7515.

CHROMOSOMAL LOCATION

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

SOURCE

Sororin (M-190) is a rabbit polyclonal antibody raised against amino acids 1-190 mapping at the N-terminus of Sororin of mouse origin.

PRODUCT

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

STORAGE

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

APPLICATIONS

Sororin (M-190) is recommended for detection of Sororin (CDCA5) of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

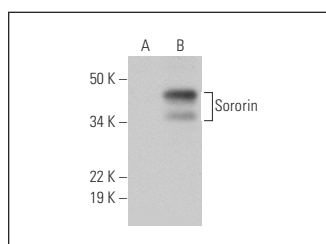
Suitable for use as control antibody for Sororin siRNA (h): sc-61599, Sororin siRNA (m): sc-61600, Sororin shRNA Plasmid (h): sc-61599-SH, Sororin shRNA Plasmid (m): sc-61600-SH, Sororin shRNA (h) Lentiviral Particles: sc-61599-V and Sororin shRNA (m) Lentiviral Particles: sc-61600-V.

Molecular Weight of Sororin: 28 kDa.

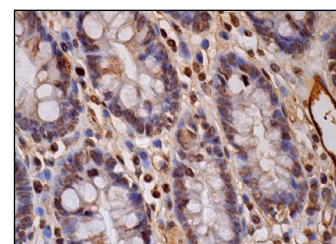
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Sororin (M-190): sc-67248. Western blot analysis of Sororin expression in non-transfected: sc-117752 (A) and human Sororin transfected: sc-159962 (B) whole cell lysates.



Sororin (M-190): sc-67248. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing nuclear staining of glandular cells and nuclear and cytoplasmic staining of endothelial cells.

RESEARCH USE

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



Try **Sororin (B-9): sc-365319** or **Sororin (D-11): sc-390900**, our highly recommended monoclonal alternatives to Sororin (M-190).