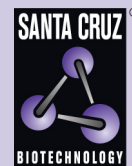


coilin (H-300): sc-32860



The Power to Question

BACKGROUND

Coilin is the primary protein of nuclear coiled (Cajal) bodies. Cajal bodies are small nuclear organelles and contain many proteins involved in RNA transcription and processing. coilin is a self-associating protein with a nucleolar localization signal. It is essential for the proper formation of Cajal bodies and for the recruitment of snRNP and survival motor neuron (SMN) complex proteins to Cajal bodies. coilin directly binds SMN proteins in the recruitment process and competes with SmB' for SMN interactions. In the developing organism, Cajal bodies play a role in the assembly of the nucleolus. While the N-terminus of coilin contains the self-associating domain, the C-terminus of coilin regulates the number of Cajal bodies present in the cell.

REFERENCES

- Andrade, L.E., et al. 1991. Human autoantibody to a novel protein of the nuclear coiled body: immunological characterization and cDNA cloning of p80-coilin. *J. Exp. Med.* 173: 1407-1419.
- Chan, E.K., et al. 1994. Structure, expression and chromosomal localization of human p80-coilin gene. *Nucleic Acids Res.* 22: 4462-4469.

CHROMOSOMAL LOCATION

Genetic locus: COIL (human) mapping to 17q22; Coil (mouse) mapping to 11 C.

SOURCE

coilin (H-300) is a rabbit polyclonal antibody raised against amino acids 277-576 mapping at the C-terminus of coilin of human origin.

PRODUCT

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

APPLICATIONS

coilin (H-300) is recommended for detection of coilin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Suitable for use as control antibody for coilin siRNA (h): sc-37570, coilin siRNA (m): sc-37571, coilin shRNA Plasmid (h): sc-37570-SH, coilin shRNA Plasmid (m): sc-37571-SH, coilin shRNA (h) Lentiviral Particles: sc-37570-V and coilin shRNA (m) Lentiviral Particles: sc-37571-V.

Molecular Weight of coilin: 80 kDa.

Positive Controls: coilin (m): 293T Lysate: sc-125155, Jurkat nuclear extract: sc-2132 or MOLT-4 nuclear extract: sc-2151.

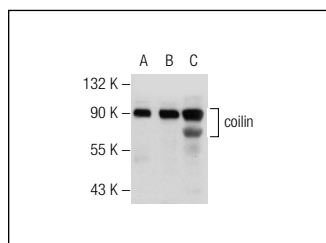
STORAGE

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

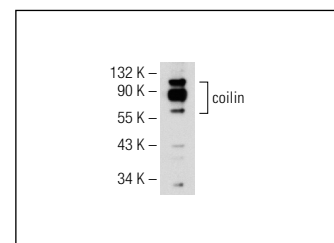
RESEARCH USE

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

DATA



coilin (H-300): sc-32860. Western blot analysis of coilin expression in non-transfected: sc-117752 (A) and mouse coilin transfected: sc-125155 (B) 293T whole cell lysates and MOLT-4 nuclear extract (C).



coilin (H-300): sc-32860. Western blot analysis of coilin expression in Jurkat nuclear extract.

SELECT PRODUCT CITATIONS

- Su, M.A., et al. 2008. Mechanisms of an autoimmunity syndrome in mice caused by a dominant mutation in Aire. *J. Clin. Invest.* 118: 1712-1726.
- Whitton, A.A., et al. 2008. Coilin levels and modifications influence artificial reporter splicing. *Cell. Mol. Life Sci.* 65: 1256-1271.
- Trubiani, O., et al. 2008. Insights into nuclear localization and dynamic association of CD38 in Raji and K-562 cells. *J. Cell. Biochem.* 103: 1294-1308.
- Mok, M.T., et al. 2010. A comparison of BRCA1 nuclear localization with 14 DNA damage response proteins and domains: identification of specific differences between BRCA1 and 53BP1 at DNA damage-induced foci. *Cell. Signal.* 22: 47-56.
- Johnson, M., et al. 2011. IQGAP1 translocates to the nucleus in early S-phase and contributes to cell cycle progression after DNA replication arrest. *Int. J. Biochem. Cell Biol.* 43: 65-73.
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- Kappei, D., et al. 2013. HOT1 is a mammalian direct telomere repeat-binding protein contributing to telomerase recruitment. *EMBO J.* 32: 1681-1701.

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Try **coilin (F-7): sc-55594** or **coilin (Pdelta): sc-56298**, our highly recommended monoclonal alternatives to coilin (H-300).