SANTA CRUZ BIOTECHNOLOGY, INC.

Coronin 1B (C-19): sc-32215

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The Power to Question

BACKGROUND

Coronins are a family of WD repeat-containing, actin-binding proteins that localize to submembraneous areas and regulate cell motility and cytoskeletal rearrangement. Coronin 1A (CORO1A, CLIPINA, CLABP, CLIPINA, TACO, p57) can form coiled coil-mediated homotrimeric complexes that influence early phagosome formation. PKC-dependent phosphorylation of Coronin 1B (CORO1B) at Serine 2 regulates leading edge dynamics and cell motility in fibroblasts through interactions with Arp2/3 complex. Coronin 1C (CORO1C, Coronin 3, HCRNN4) is abundant in differentiating Neuro-2a cells, PC-12 cells and primary oligodendrocytes, where it is thought to influence neuron morphogenesis and migration. Coronin 2A (CORO2A, CLIPINB, IR10, WDR2) is a component of the approximately 1.5-2 megadalton N-CoR (nuclear receptor corepressor) complex of 10-12 proteins, which recruits HDACs to generate repressive chromatin. Coronin 7 (CORO7, CRN7) localizes to the Golgi membrane and influences the organization of intracellular membrane compartments and vesicular trafficking. Coronin 2B (CORO2B, CLIPINC) and Coronin 6 (CORO6) are similar to other members of this family, since they possess a conserved basic N-terminal motif and 3-10 WD repeats clustered in one to two core domains.

REFERENCES

1. Mishima, M., et al. 1999. Coronin localizes to leading edges and is involved in cell spreading and lamellipodium extension in vertebrate cells. J. Cell Sci. 112: 2833-2842.
2. Spoerl, Z., et al. 2002. Oligomerization, F-Actin interaction, and membrane association of the ubiquitous mammalian Coronin 3 are mediated by its carboxyl terminus. J. Biol. Chem. 277: 48858-48867.
3. Yoon, H.G., et al. 2003. Purification and functional characterization of the human N-CoR complex: the roles of HDAC3, TBL1 and TBLR1. EMBO J. 22: 1336-1346.
4. Rybakin, V., et al. 2004. Coronin 7, the mammalian POD-1 homologue, localizes to the Golgi apparatus. FEBS Lett. 573: 161-167.
5. Yan, M., et al. 2005. Coronin-1 function is required for phagosome formation. Mol. Biol. Cell 16: 3077-3087.
6. Rybakin, V., et al. 2005. Coronin proteins as multifunctional regulators of the cytoskeleton and membrane trafficking. Bioessays 27: 625-632.

CHROMOSOMAL LOCATION

Genetic locus: CORO1B (human) mapping to 11q13.2; Coro1b (mouse) mapping to 19 A.

SOURCE

Coronin 1B (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Coronin 1B 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.

Blocking peptide available for competition studies, sc-32213 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Coronin 1B (C-19) is recommended for detection of Coronin 1B 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).

Coronin 1B (C-19) is also recommended for detection of Coronin 1B in additional species, including equine, canine and porcine.

Suitable for use as control antibody for Coronin 1B siRNA (h): sc-44695, Coronin 1B siRNA (m): sc-44696, Coronin 1B shRNA Plasmid (h): sc-44695-SH, Coronin 1B shRNA Plasmid (m): sc-44696-SH, Coronin 1B shRNA (h) Lentiviral Particles: sc-44695-V and Coronin 1B shRNA (m) Lentiviral Particles: sc-44696-V.

Molecular Weight of Coronin 1B: 57 kDa.

Positive Controls: WI-38 whole cell lysate: sc-364260, NIH/3T3 whole cell lysate: sc-2210 or HeLa nuclear extract: sc-2120.

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.

SELECT PRODUCT CITATIONS

1. Ma, C., et al. 2011. Differential proteomic analysis of platelets suggested possible signal cascades network in platelets treated with salvianolic acid B. PLoS ONE 6: e14692.

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.

PROTOCOLS

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

MONOS Satisfaction Guaranteed

Try **Coronin 1B (G-8): sc-271445** or **Coronin 1B (E-3): sc-271375**, our highly recommended monoclonal alternatives to Coronin 1B (C-19).