SANTA CRUZ BIOTECHNOLOGY, INC.

Coronin 2B (C-15): sc-32206



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 (COR01C, 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 (Part 17): 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. Gatfield, J., et al. 2005. Association of the leukocyte plasma membrane with the actin cytoskeleton through coiled coil-mediated trimeric Coronin 1 molecules. Mol. Biol. Cell. 16: 2786-2798.
- 6. Hasse, A., et al. 2005. Coronin 3 and its role in murine brain morphogenesis. Eur. J. Neurosci. 21: 1155-1168.
- 7. Yan, M., et al. 2005. Coronin-1 function is required for phagosome formation. Mol. Biol. Cell 16: 3077-3087.
- 8. Rybakin, V., et al. 2005. Coronin proteins as multifunctional regulators of the cytoskeleton and membrane trafficking. Bioessays 27: 625-632.

CHROMOSOMAL LOCATION

Genetic locus: CORO2B (human) mapping to 15q23; Coro2b (mouse) mapping to 9 B.

SOURCE

Coronin 2B (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Coronin 2B of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-32206 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Coronin 2B (C-15) is recommended for detection of Coronin 2B 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).

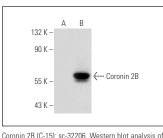
Coronin 2B (C-15) is also recommended for detection of Coronin 2B in additional species, including equine, canine and porcine.

Suitable for use as control antibody for Coronin 2B siRNA (h): sc-44687, Coronin 2B siRNA (m): sc-44688. Coronin 2B shRNA Plasmid (h): sc-44687-SH. Coronin 2B shRNA Plasmid (m): sc-44688-SH, Coronin 2B shRNA (h) Lentiviral Particles: sc-44687-V and Coronin 2B shRNA (m) Lentiviral Particles: sc-44688-V.

Molecular Weight of Coronin 2B: 57 kDa.

Positive Controls: Coronin 2B (h2): 293T Lysate: sc-172582.

DATA



Coronin 2B expression in non-transfected: sc-117752 (A and human Coronin 2B transfected: sc-172582 (B) 2931 whole cell lysates

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.