SANTA CRUZ BIOTECHNOLOGY, INC.

Coronin 1C (G-R2): sc-130448

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, 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 2 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. 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.

CHROMOSOMAL LOCATION

Genetic locus: CORO1C (human) mapping to 12q24.11; Coro1c (mouse) mapping to 5 F.

SOURCE

Coronin 1C (G-R2) is a mouse monoclonal antibody raised against recombinant Coronin 1C of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Coronin 1C (G-R2) is recommended for detection of Coronin 1C of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for Coronin 1C siRNA (h): sc-44693, Coronin 1C siRNA (m): sc-44694, Coronin 1C shRNA Plasmid (h): sc-44693-SH, Coronin 1C shRNA Plasmid (m): sc-44694-SH, Coronin 1C shRNA (h) Lentiviral Particles: sc-44693-V and Coronin 1C shRNA (m) Lentiviral Particles: sc-44694-V.

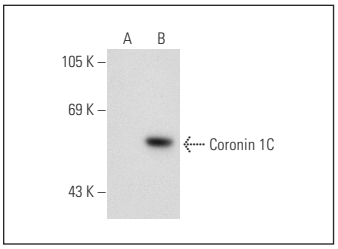
Molecular Weight of Coronin 1C: 57 kDa.

Positive Controls: Coronin 1C (m2): 293T Lysate: sc-119414 or HeLa nuclear extract: sc-2120.

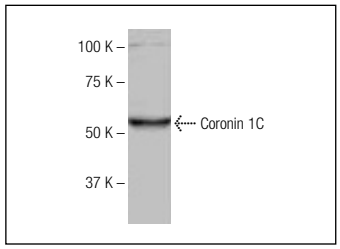
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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).

DATA



Coronin 1C (G-R2): sc-130448. Western blot analysis of Coronin 1C expression in non-transfected: sc-117752 (**A**) and mouse Coronin 1C transfected: sc-119414 (**B**) 293T whole cell lysates.



Coronin 1C (G-R2): sc-130448. Western blot analysis of Coronin 1C expression in HeLa nuclear extract.

SELECT PRODUCT CITATIONS

1. Diaz, G., et al. 2016. Changes in the membrane-associated proteins of exosomes released from human macrophages after *Mycobacterium tuberculosis* infection. Sci. Rep. 6: 37975.

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.