Coronin 2A (h2): 293T Lysate: sc-172930



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, 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

- 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.
- 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.
- 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.
- 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.
- Hasse, A., et al. 2005. Coronin 3 and its role in murine brain morphogenesis. Eur. J. Neurosci. 21: 1155-1168.
- 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.
- 9. Cai, L., et al. 2005. Phosphorylation of coronin 1B by protein kinase C regulates interaction with Arp2/3 and cell motility. J. Biol. Chem. 280: 31913-31923.

CHROMOSOMAL LOCATION

Genetic locus: CORO2A (human) mapping to 9q22.33.

RESEARCH USE

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

PRODUCT

Coronin 2A (h2): 293T Lysate represents a lysate of human Coronin 2A transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

Coronin 2A (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Coronin 2A antibodies.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

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