

Coronin 1A (h): 293T Lysate: sc-111941

BACKGROUND

Coronins are a family of WD repeat-containing, Actin-binding proteins that localize to submembrane 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 three to ten WD repeats clustered in one to two core domains.

REFERENCES

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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. Rybakina, 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. Rybakina, 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.

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.

CHROMOSOMAL LOCATION

Genetic locus: CORO1A (human) mapping to 16p11.2.

PRODUCT

Coronin 1A (h): 293T Lysate represents a lysate of human Coronin 1A transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Coronin 1A (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Coronin 1A antibodies. Recommended use: 10-20 µl per lane.

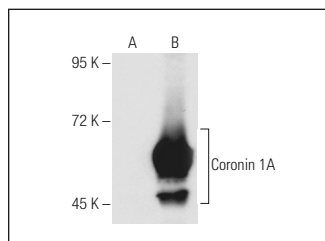
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Coronin 1A (14.1): sc-100925 is recommended as a positive control antibody for Western Blot analysis of enhanced human Coronin 1A expression in Coronin 1A transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Coronin 1A (14.1): sc-100925. Western blot analysis of Coronin 1A expression in non-transfected: sc-117752 (A) and human Coronin 1A transfected: sc-111941 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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