

Coronin 2A (A-3): sc-271873

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 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.
- 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.

CHROMOSOMAL LOCATION

Genetic locus: *Coro2a* (mouse) mapping to 4 B1.

SOURCE

Coronin 2A (A-3) is a mouse monoclonal antibody raised against amino acids 376-480 mapping near the C-terminus of Coronin 2A of mouse origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Coronin 2A (A-3) is recommended for detection of Coronin 2A of mouse and rat origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for Coronin 2A siRNA (m): sc-44686, Coronin 2A shRNA Plasmid (m): sc-44686-SH and Coronin 2A shRNA (m) Lentiviral Particles: sc-44686-V.

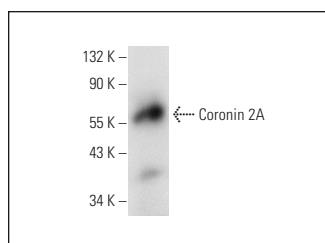
Molecular Weight of Coronin 2A: 57 kDa.

Positive Controls: c4 whole cell lysate: sc-364186 or AMJ2-C8 whole cell lysate: sc-364366.

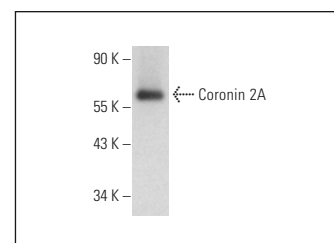
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Coronin 2A (A-3): sc-271873. Western blot analysis of Coronin 2A expression in c4 whole cell lysate.



Coronin 2A (A-3): sc-271873. Western blot analysis of Coronin 2A expression in AMJ2-C8 whole cell lysate.

SELECT PRODUCT CITATIONS

- Rastetter, R.H., et al. 2015. Coronin 2A (CRN5) expression is associated with colorectal adenoma-adenocarcinoma sequence and oncogenic signalling. *BMC Cancer* 15: 638.

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.