

# Coronin 1A (14.1): sc-100925

## 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 (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.

## CHROMOSOMAL LOCATION

Genetic locus: CORO1A (human) mapping to 16p11.2; Coro1a (mouse) mapping to 7 F3.

## SOURCE

Coronin 1A (14.1) is a mouse monoclonal antibody raised against recombinant Coronin 1A of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Coronin 1A (14.1) is recommended for detection of Coronin 1A 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), immunohistochemistry (including paraffin-embedded sections) (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 1A siRNA (h): sc-60434, Coronin 1A siRNA (m): sc-60435, Coronin 1A shRNA Plasmid (h): sc-60434-SH, Coronin 1A shRNA Plasmid (m): sc-60435-SH, Coronin 1A shRNA (h) Lentiviral Particles: sc-60434-V and Coronin 1A shRNA (m) Lentiviral Particles: sc-60435-V.

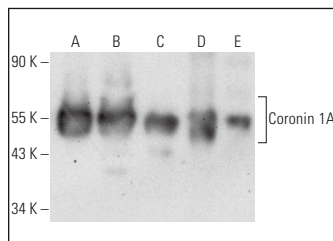
Molecular Weight of Coronin 1A: 57 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, HL-60 whole cell lysate: sc-2209 or Jurkat whole cell lysate: sc-2204.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## DATA



Coronin 1A (14.1): sc-100925. Western blot analysis of Coronin 1A expression in Jurkat (A), HL-60 (B) and RAW 264.7 (C) whole cell lysates and mouse spleen (D) and rat spleen (E) tissue extracts.

## SELECT PRODUCT CITATIONS

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- Siegmund, K., et al. 2016. Proof of principle for a T lymphocyte intrinsic function of Coronin 1A. *J. Biol. Chem.* 291: 22086-22092.
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- Arts, J.J., et al. 2021. Endothelial junctional membrane protrusions serve as hotspots for neutrophil transmigration. *Elife* 10: e66074.
- Pandey, H.S., et al. 2022. Coronin 1A facilitates calcium mobilization and promotes astrocyte reactivity in HIV-1 neuropathogenesis. *FASEB Bioadv.* 4: 254-272.
- Kant, R., et al. 2024. Dexamethasone targets actin cytoskeleton signaling and inflammatory mediators to reverse sulfur mustard-induced toxicity in rabbit corneas. *Toxicol. Appl. Pharmacol.* 483: 116834.
- Kros, J.M., et al. 2024. T cell induced expression of Coronin-1A facilitates blood-brain barrier transmigration of breast cancer cells. *Sci. Rep.* 14: 31516.

## RESEARCH USE

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