

# Coronin 1B (E-3): sc-271375

## 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, 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

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- 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.
- Yan, M., et al. 2005. Coronin-1 function is required for phagosome formation. *Mol. Biol. Cell* 16: 3077-3087.
- Rybakin, V., et al. 2005. Coronin proteins as multifunctional regulators of the cytoskeleton and membrane trafficking. *Bioessays* 27: 625-632.

## CHROMOSOMAL LOCATION

Genetic locus: CORO1B (human) mapping to 11q13.2.

## SOURCE

Coronin 1B (E-3) is a mouse monoclonal antibody raised against amino acids 390-489 mapping at the C-terminus of Coronin 1B of human origin.

## PRODUCT

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

## APPLICATIONS

Coronin 1B (E-3) is recommended for detection of Coronin 1B of human 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 1B siRNA (h): sc-44695, Coronin 1B shRNA Plasmid (h): sc-44695-SH and Coronin 1B shRNA (h) Lentiviral Particles: sc-44695-V.

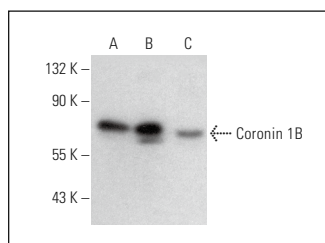
Molecular Weight of Coronin 1B: 57 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, A-431 whole cell lysate: sc-2201 or HeLa whole cell lysate: sc-2200.

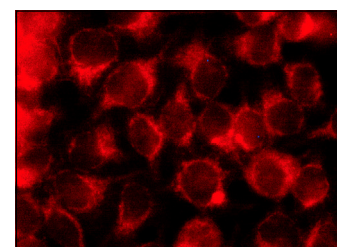
## RECOMMENDED SUPPORT REAGENTS

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 L-Agarose: sc-2336 (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 1B (E-3): sc-271375. Western blot analysis of Coronin 1B expression in HeLa (A), Hep G2 (B) and A-431 (C) whole cell lysates.



Coronin 1B (E-3): sc-271375. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

## 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.