

Coronin 1C (D-9): sc-376919

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.

CHROMOSOMAL LOCATION

Genetic locus: CORO1C (human) mapping to 12q24.11; Coro1c (mouse) mapping to 5 F.

SOURCE

Coronin 1C (D-9) is a mouse monoclonal antibody raised against amino acids 390-474 mapping at the C-terminus of Coronin 1C 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.

RESEARCH USE

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

APPLICATIONS

Coronin 1C (D-9) is recommended for detection of Coronin 1C of mouse, rat and 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), 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 1C siRNA (h): sc-44693, Coronin 1C siRNA (m): sc-44694, Coronin 1C shRNA Plasmid (h): sc-44693-SH, Coronin 1C shRNA Plasmid (m): sc-44694-SH, Coronin 1C shRNA (h) Lentiviral Particles: sc-44693-V and Coronin 1C shRNA (m) Lentiviral Particles: sc-44694-V.

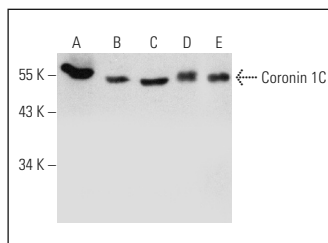
Molecular Weight of Coronin 1C: 57 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, NIH/3T3 nuclear extract: sc-2138 or Neuro-2A whole cell lysate: sc-364185.

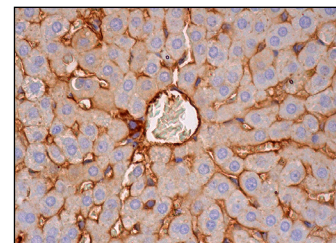
RECOMMENDED SUPPORT REAGENTS

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. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohisto-mount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Coronin 1C (D-9): sc-376919. Western blot analysis of Coronin 1C expression in HeLa (A) and NIH/3T3 (B) nuclear extracts, Neuro-2A whole cell lysate (C) and mouse brain (D) and rat hippocampus (E) tissue extracts.



Coronin 1C (D-9): sc-376919. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing membrane staining of bile duct cells and cytoplasmic and membrane staining of hepatic sinusoids.

SELECT PRODUCT CITATIONS

- Gao, Y., et al. 2017. Coronin 3 negatively regulates G6PC3 in Hep G2 cells, as identified by label-free mass-spectrometry. *Mol. Med. Rep.* 16: 3407-3414.
- Shao, J., et al. 2018. Coronin 1C and F-Actin promote metastasis of breast cancer. *Med. Sci. Monit.* 24: 5980-5987.
- Yamaguchi, Y., et al. 2022. Coronin1C is a GDP-specific Rab44 effector that controls osteoclast formation by regulating cell motility in macrophages. *Int. J. Mol. Sci.* 23: 6619.

STORAGE

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

PROTOCOLS

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