SANTA CRUZ BIOTECHNOLOGY, INC.

Coronin 2B siRNA (m): sc-44688

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, 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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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. Rybakin, V., et al. 2004. Coronin 7, the mammalian POD-1 homolog, localizes to the Golgi apparatus. FEBS Lett. 573: 161-167.
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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Coro2b (mouse) mapping to 9 B.

PRODUCT

Coronin 2B siRNA (m) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Coronin 2B shRNA Plasmid (m): sc-44688-SH and Coronin 2B shRNA (m) Lentiviral Particles: sc-44688-V as alternate gene silencing products.

For independent verification of Coronin 2B (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-44688A, sc-44688B and sc-44688C.

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

Coronin 2B siRNA (m) is recommended for the inhibition of Coronin 2B expression in mouse cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 µM in 66 µl. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor Coronin 2B gene expression knockdown using RT-PCR Primer: Coronin 2B (m)-PR: sc-44688-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

RESEARCH USE

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