SANTA CRUZ BIOTECHNOLOGY, INC.

Liprin α4 siRNA (m): sc-146755

BACKGROUND

Liprins interact with members of the leukocyte common antigen-related (LAR) family of transmembrane protein tyrosine phosphatases, which are implicated in axon guidance and mammary gland development. Liprins are multivalent proteins that form complex structures and act as scaffolds for the recruitment and anchoring of LAR phosphatases. Based on sequence similarites and binding characteristics, liprins are subdivided into α-type and β-type liprins. Both α- and β-liprins homodimerize via their N-terminal, coiled coil regions. Liprin α4, also known as PTPRF-interacting protein α4, regulates the disassembly of focal adhesions. Liprin α4 is expressed in heart, brain and skeletal muscle. Due to alternative splicing, a second isoform exists for Liprin α4 that lacks amino acids 444-452.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Ppfia4 (mouse) mapping to 1 E4.

PROTOCOLS

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

PRODUCT

Liprin α4 siRNA (m) is a target-specific 19-25 nt siRNA 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 Liprin α4 shRNA Plasmid (m): sc-146755-SH and Liprin α4 shRNA (m) Lentiviral Particles: sc-146755-V as alternate gene silencing products.

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

Liprin α4 siRNA (m) is recommended for the inhibition of Liprin α4 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 Liprin α4 gene expression knockdown using RT-PCR Primer: Liprin α4 (m)-PR: sc-146755-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.