SANTA CRUZ BIOTECHNOLOGY, INC.

Liprin α3 siRNA (m): sc-146754

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 and β liprins. Both α and β liprins homodimerize via their N-terminal, coiled coil regions. Liprin α3, also designated PTPRF-interacting protein α3, is a cytoplasmic protein expressed exclusively in brain. Due to alternative splicing, a second isoform exists for Liprin α3. Isoform 2 lacks the amino acid sequence 937-945.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Ppfia3 (mouse) mapping to 7 B4.

PROTOCOLS

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

PRODUCT

Liprin α3 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 α3 shRNA Plasmid (m): sc-146754-SH and Liprin α3 shRNA (m) Lentiviral Particles: sc-146754-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 α3 siRNA (m) is recommended for the inhibition of Liprin α3 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 α3 gene expression knockdown using RT-PCR Primer: Liprin α3 (m)-PR: sc-146754-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.