

AI428936 siRNA (m): sc-140932

BACKGROUND

C19orf46 (chromosome 19 open reading frame 46), also known as Nesprin-4, is a 404 amino acid single-pass type IV membrane protein that belongs to the nesprin family. Its mouse homolog, AI428936, is a 388 amino acid protein mapping to mouse chromosome 7. C19orf46 participates in the establishment of secretory epithelial morphology by inducing kinesin-dependent apical migration of the centrosome and Golgi apparatus as well as basal localization of the nucleus. C19orf46 interacts with UKHC and KCL1, and exists as two alternatively spliced isoforms. C19orf46 contains a KASH domain, which consists of a transmembrane motif, mediates nuclear envelope targeting and binds to the SUN domain of SUN1 and SUN2. C19orf46 is encoded by a gene located on human chromosome 19, which consists of approximately 63 million bases and makes up over 2% of human genomic DNA.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: AI428936 (mouse) mapping to 7 B1.

PRODUCT

AI428936 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see AI428936 shRNA Plasmid (m): sc-140932-SH and AI428936 shRNA (m) Lentiviral Particles: sc-140932-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 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

AI428936 siRNA (m) is recommended for the inhibition of AI428936 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 μ M in 66 μ l. 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 AI428936 gene expression knockdown using RT-PCR Primer: AI428936 (m)-PR: sc-140932-PR (20 μ l). 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.