

Paralemmin 2 siRNA (h): sc-92466

BACKGROUND

Paralemmin 2, also known as PALM2, is a member of the Paralemmin family of proteins, which also includes Palmdelphin and Paralemmin, also known as Paralemmin 1. Paralemmin 2 shares 26% amino acid identity with Palmdelphin and 37% amino acid identity with Paralemmin, a widely expressed peripheral membrane protein that is involved in cell structure and shape. Paralemmin 2 is an acidic 379 amino acid protein with a C-terminal CAAX motif and it is expressed in infantile muscle, infantile heart and human skin fibroblasts. PALM2, the gene encoding Paralemmin 2, is closely adjacent to and functionally linked to the AKAP2 gene. Through differential splicing and RNA read-through, four major protein products are produced by these two genes, namely Paralemmin 2, AKAP 2, AKAP-KL and PALM2-AKAP2. Paralemmin 2 is encoded by the first eight exons.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PALM2 (human) mapping to 9q31.3.

PROTOCOLS

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

PRODUCT

Paralemmin 2 siRNA (h) 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Paralemmin 2 shRNA Plasmid (h): sc-92466-SH and Paralemmin 2 shRNA (h) Lentiviral Particles: sc-92466-V as alternate gene silencing products.

For independent verification of Paralemmin 2 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-92466A, sc-92466B and sc-92466C.

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

Paralemmin 2 siRNA (h) is recommended for the inhibition of Paralemmin 2 expression in human 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 Paralemmin 2 gene expression knockdown using RT-PCR Primer: Paralemmin 2 (h)-PR: sc-92466-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.