SANTA CRUZ BIOTECHNOLOGY, INC.

SCUBE1 siRNA (m): sc-153275

BACKGROUND

SCUBE1 (signal peptide, CUB domain, EGF-like 1) is a 988 amino acid protein that is both secreted and localized to the peripheral membrane. Containing one CUB domain and nine EGF-like domains, SCUBE1 is thought to function as an adhesive protein that exists as a heterooligomer with SCUBE2 and SCUBE3 and may play an important role in vascular biology. SCUBE1, which is highly expressed in platelets and is also present in endothelial cells, is subject to post-translational N-glycosylation and may be cleaved to produce a small active peptide. The gene encoding SCUBE1 maps to human chromosome 22, which houses over 500 genes and is the second smallest human chromosome. Mutations in several of the genes that map to chromosome 22 are involved in the development of Phelan-McDermid syndrome, Neurofibromatosis type 2, autism and schizophrenia.

REFERENCES

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Scube1 (mouse) mapping to 15 E1.

PRODUCT

SCUBE1 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 SCUBE1 shRNA Plasmid (m): sc-153275-SH and SCUBE1 shRNA (m) Lentiviral Particles: sc-153275-V as alternate gene silencing products.

For independent verification of SCUBE1 (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-153275A, sc-153275B and sc-153275C.

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

SCUBE1 siRNA (m) is recommended for the inhibition of SCUBE1 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 SCUBE1 gene expression knockdown using RT-PCR Primer: SCUBE1 (m)-PR: sc-153275-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.