SANTA CRUZ BIOTECHNOLOGY, INC.

EGFL3 siRNA (m): sc-144596

BACKGROUND

Epidermal growth factor (EGF) repeat-containing proteins constitute an expanding family of proteins that are involved in several cellular activities, including blood coagulation, fibrinolysis, cell adhesion, and neural and vertebrate development. In addition, this family encodes proteins that govern cellular proliferative responses. EGFL3 (epidermal growth factor-like protein 3), also known as MEGF6 (multiple epidermal growth factor-like domains protein 6), is a 1,541 amino acid secreted protein containing 27 EGF-like domains and an EMI domain. Existing as two alternatively spliced isoforms, the gene encoding EGFL3 maps to human chromosome 1p36.32. The largest human chromosome, spanning about 260 million base pairs and making up 8% of the human genome, chromosome 1 contains about 3,000 genes. The rare aging disease Hutchinson-Gilford progeria, as well as Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome, are associated with chromosome 1.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Megf6 (mouse) mapping to 4 E2.

PRODUCT

EGFL3 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 EGFL3 shRNA Plasmid (m): sc-144596-SH and EGFL3 shRNA (m) Lentiviral Particles: sc-144596-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

EGFL3 siRNA (m) is recommended for the inhibition of EGFL3 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 EGFL3 gene expression knockdown using RT-PCR Primer: EGFL3 (m)-PR: sc-144596-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.

PROTOCOLS

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