SANTA CRUZ BIOTECHNOLOGY, INC.

EGFL5 siRNA (h): sc-92786

BACKGROUND

The epidermal growth factor (EGF) repeat-containing proteins constitute an expanding family of proteins that are involved in several cellular activities, such as blood coagulation, fibrinolysis, cell adhesion, and neural and vertebrate development. EGFL5 (epidermal growth factor-like protein 5), also known as MEGF9 (multiple epidermal growth factor-like domains protein 9), is a 602 amino acid single-pass type I membrane protein. EGFL5 contains five laminin EGF-like domains, as well as an N-terminal region with multiple O-glycosylation sites. Primarily expressed in adult central and peripheral nervous system, EGFL5 may function as a guidance or signaling molecule. The gene encoding EGFL5 maps to human chromosome 9q33.2. Chromosome 9 consists of about 145 million bases, represents 4% of the human genome and encodes nearly 900 genes.

REFERENCES

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5. Cunha, I.W., Carvalho, K.C., Martins, W.K., Marques, S.M., Muto, N.H., Falzoni, R., Rocha, R.M., Aguiar, S., Simoes, A.C., Fahham, L., Neves, E.J., Soares, F.A. and Reis, L.F. 2010. Identification of genes associated with local aggressiveness and metastatic behavior in soft tissue tumors. Transl. Oncol. 3: 23-32.

CHROMOSOMAL LOCATION

Genetic locus: MEGF9 (human) mapping to 9q33.2.

PRODUCT

EGFL5 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see EGFL5 shRNA Plasmid (h): sc-92786-SH and EGFL5 shRNA (h) Lentiviral Particles: sc-92786-V as alternate gene silencing products.

For independent verification of EGFL5 (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-92786A, sc-92786B and sc-92786C.

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

EGFL5 siRNA (h) is recommended for the inhibition of EGFL5 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 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 EGFL5 gene expression knockdown using RT-PCR Primer: EGFL5 (h)-PR: sc-92786-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.