SANTA CRUZ BIOTECHNOLOGY, INC.

EGFL8 siRNA (m): sc-144600

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. EGFL8 (EGF-like domain-containing protein 8), also known as C6orf8, NG3 and VE-statin-2, is a 293 amino acid secreted protein that contains two EGF-like domains and one EMI domain. Via its EGF and EMI domains, EGFL8 may participate in protein-protein interactions that correlate with cellular proliferation and developmental signaling events. In mice, EGFL8 is expressed predominately in brain, kidney, lung and thymus.

REFERENCES

1. Appella, E., et al. 1988. Structure and function of epidermal growth factor-like regions in proteins. FEBS Lett. 231: 1-4.
2. Davis, C.G. 1990. The many faces of epidermal growth factor repeats. New Biol. 2: 410-419.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 609897. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
4. Callebaut, I., et al. 2003. EMI domains are widespread and reveal the probable orthologs of the *Caenorhabditis elegans* CED-1 protein. Biochem. Biophys. Res. Commun. 300: 619-623.
5. Xie, T., et al. 2003. Analysis of the gene-dense major histocompatibility complex class III region and its comparison to mouse. Genome Res. 13: 2621-2636.
6. Fitch, M.J., et al. 2004. Egfl7, a novel epidermal growth factor-domain gene expressed in endothelial cells. Dev. Dyn. 230: 316-324.
7. Zhang, Z., et al. 2004. Signal peptide prediction based on analysis of experimentally verified cleavage sites. Protein Sci. 13: 2819-2824.

CHROMOSOMAL LOCATION

Genetic locus: Egfl8 (mouse) mapping to 17 B1.

PRODUCT

EGFL8 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 EGFL8 shRNA Plasmid (m): sc-144600-SH and EGFL8 shRNA (m) Lentiviral Particles: sc-144600-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

EGFL8 siRNA (m) is recommended for the inhibition of EGFL8 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 EGFL8 gene expression knockdown using RT-PCR Primer: EGFL8 (m)-PR: sc-144600-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.