SANTA CRUZ BIOTECHNOLOGY, INC.

EGFL6 siRNA (h): sc-39425

BACKGROUND

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. In addition, this family encodes proteins that govern cellular proliferative responses. EGFL6, a human EGF repeat superfamily member that maps to human chromosome X, encodes a predicted signal peptide suggesting that it is secreted. Other predicted features include four and one-half EGF-like repeat domains, two N-linked glycosylation sites, an integrin association motif, and a tyrosine phosphorylation site. EGFL6 is expressed in brain and lung tumors and fetal tissues, but is generally absent from normal adult tissues.

REFERENCES

1. van de Poll, M.L., van Vugt, M.J., Lenferink, A.E. and van Zoelen, E.J. 1998. Identification of the minimal requirements for binding to the human epidermal growth factor (EGF) receptor using chimeras of human EGF and an EGF repeat of *Drosophila* Notch. J. Biol. Chem. 273: 16075-16081.
2. Yeung, G., Mulero, J.J., Berntsen, R.P., Loeb, D.B., Drmanac, R. and Ford, J.E. 1999. Cloning of a novel epidermal growth factor repeat containing gene EGFL6: expressed in tumor and fetal tissues. Genomics 62: 304-307.
3. Buchner, G., Orfanelli, U., Quaderi, N., Bassi, M.T., Andolfi, G., Ballabio, A. and Franco, B. 2000. Identification of a new EGF-repeat-containing gene from human Xp22: a candidate for developmental disorders. Genomics 65: 16-23.
4. Greener, M. 2000. X marks the spot in lung cancer. Mol. Med. Today 6: 139-140.

CHROMOSOMAL LOCATION

Genetic locus: EGFL6 (human) mapping to Xp22.2.

PRODUCT

EGFL6 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 EGFL6 shRNA Plasmid (h): sc-39425-SH and EGFL6 shRNA (h) Lentiviral Particles: sc-39425-V as alternate gene silencing products.

For independent verification of EGFL6 (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-39425A, sc-39425B and sc-39425C.

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.

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

EGFL6 siRNA (h) is recommended for the inhibition of EGFL6 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 EGFL6 gene expression knockdown using RT-PCR Primer: EGFL6 (h)-PR: sc-39425-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.