SANTA CRUZ BIOTECHNOLOGY, INC.

ETV3L siRNA (h): sc-78726

BACKGROUND

ETS family members share a highly conserved DNA binding domain and play a role in growth factor pathways regulating proliferation and differentiation. ETV3 (ETS translocation variant 3), also known as PE-1 (PU-Ets related-1) or METS (Mitogenic Ets transcriptional suppressor), belongs to the ETS family of transcription factors and functions as a transcriptional repressor. PE-1 is ubiquitously expressed and localizes to the nucleus. Its expression can be induced by IL-10 via the STAT3 pathway suggesting that PE-1 contributes to the IL-10 downstream anti-inflammatory effects. ETV3L (ETS translocation variant 3-like protein) is a 361 amino acid nuclear protein that functions as a transcriptional regulator and belongs to the ETS family. Containing one ETS DNA-binding domain, ETV3L is encoded by a gene that maps to human chromosome 1q23.1.

REFERENCES

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3. Bidder, M., et al. 2000. Ets domain transcription factor PE1 suppresses human interstitial collagenase promoter activity by antagonizing protein-DNA interactions at a critical AP1 element. Biochemistry 39: 8917-8928.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 164873. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
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6. El Kasmi, K.C., et al. 2007. Cutting edge: A transcriptional repressor and corepressor induced by the Stat3-regulated anti-inflammatory signaling pathway. J. Immunol. 179: 7215-7219.
7. Hester, K.D., et al. 2007. Differential repression of c-Myc and Cdc2 gene expression by ERF and PE-1/METS. Cell Cycle 6: 1594-1604.

CHROMOSOMAL LOCATION

Genetic locus: ETV3L (human) mapping to 1q23.1.

PRODUCT

ETV3L 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 ETV3L shRNA Plasmid (h): sc-78726-SH and ETV3L shRNA (h) Lentiviral Particles: sc-78726-V as alternate gene silencing products.

For independent verification of ETV3L (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-78726A, sc-78726B and sc-78726C.

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

ETV3L siRNA (h) is recommended for the inhibition of ETV3L 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 ETV3L gene expression knockdown using RT-PCR Primer: ETV3L (h)-PR: sc-78726-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.