

## TAF4 siRNA (h): sc-78344

### BACKGROUND

A group of small secreted proteins known as the TAF4 family consists of five highly homologous genes: TAF41, TAF42, TAF43, TAF44 and TAF45. Members of the TAF4 family contain conserved cysteine residues at fixed positions and are highly expressed in brain. The TAF4 family may be distantly related to a member of the CC-chemokine family known as MIP-1 $\alpha$ , and have been postulated to regulate nervous and immune cells of the brain as neurokines or chemokines. TAF4 [family with sequence similarity 19 (chemokine (C-C motif)-like), member A4], also known as chemokine-like protein TAF4-4, protein FAM19A4, TAF4-4, FLJ25161 or FAM19A4, is a 140 amino acid protein belonging to the FAM19/TAF4 family. TAF4 is a secreted protein that localizes to brain. The gene encoding TAF4 maps to human chromosome 3p14.1, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

### REFERENCES

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3. Tsend-Ayush, E., Grützner, F., Yue, Y., Grossmann, B., Hänsel, U., Sudbrak, R. and Haaf, T. 2004. Plasticity of human chromosome 3 during primate evolution. *Genomics* 83: 193-202.
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5. Yue, Y., Grossmann, B., Ferguson-Smith, M., Yang, F. and Haaf, T. 2005. Comparative cytogenetics of human chromosome 3q21.3 reveals a hot spot for ectopic recombination in hominoid evolution. *Genomics* 85: 36-47.

### CHROMOSOMAL LOCATION

Genetic locus: FAM19A4 (human) mapping to 3p14.1.

### PRODUCT

TAF4 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see TAF4 shRNA Plasmid (h): sc-78344-SH and TAF4 shRNA (h) Lentiviral Particles: sc-78344-V as alternate gene silencing products.

For independent verification of TAF4 (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-78344A, sc-78344B and sc-78344C.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### 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  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

### APPLICATIONS

TAF4 siRNA (h) is recommended for the inhibition of TAF4 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  $\mu$ M in 66  $\mu$ l. 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 TAF4 gene expression knockdown using RT-PCR Primer: TAF4 (h)-PR: sc-78344-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.