

TAF A1 siRNA (m): sc-154056

BACKGROUND

A group of small secreted proteins known as the TAF A family consists of five highly homologous genes: TAF A1, TAF A2, TAF A3, TAF A4 and TAF A5. Members of the TAF A family contain conserved cysteine residues at fixed positions and are highly expressed in brain. The TAF A family may be distantly related to a member of the CC-chemokine family known as MIP-1 α , and have been postulated to regulate nervous and immune cells of the brain as neurokines or chemokines. TAF A1 [family with sequence similarity 19 (chemokine (C-C motif)-like), member A1], also known as chemokine-like protein TAF A-1, protein FAM19A1 TAF A-1 or FAM19A1, is a 19 amino acid brain specific protein belonging to the FAM19/TAF A family. TAF A1 is a secreted protein and is encoded by a gene mapping to human chromosome 3, 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: Fam19a1 (mouse) mapping to 6 D3.

PRODUCT

TAF A1 siRNA (m) 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see TAF A1 shRNA Plasmid (m): sc-154056-SH and TAF A1 shRNA (m) Lentiviral Particles: sc-154056-V as alternate gene silencing products.

For independent verification of TAF A1 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-154056A, sc-154056B and sc-154056C.

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

APPLICATIONS

TAF A1 siRNA (m) is recommended for the inhibition of TAF A1 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 μ M in 66 μ 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 TAF A1 gene expression knockdown using RT-PCR Primer: TAF A1 (m)-PR: sc-154056-PR (20 μ 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 for detailed protocols and support products.