SANTA CRUZ BIOTECHNOLOGY, INC.

TCF-19 siRNA (m): sc-63114

BACKGROUND

TCF-19 (transcription factor 19), also known as SC1 or SC1-1, is a 345 amino acid protein that contains one FHA domain, a proline-rich domain and one PHD-type zinc finger. Localizing to the nucleus, TCF-19 is a growth regulated protein that is believed to function as a *trans*-activating factor with a role in the transcription of genes involved in the late stages of cell cycle progression (G_1 to S transition or entry of cells into G_2 and mitosis). TCF-19 is expressed preferentially in the G_1-S phase of the cell cycle. The gene encoding TCF-19 localizes to a critical region on chromosome 6 that has been associated with psoriasis vulgaris, a disorder of the skin that is characterized by hyperproliferation of epidermal cells. This suggests that TCF-19, via its regulation of late cell cycle-specific genes, may play a role in the development of this disorder.

REFERENCES

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3. Goldsworthy, M., et al. 1997. Identification of new HLA class I region genes by sample sequencing. Immunogenetics 46: 206-212.
4. Oka, A., et al. 1999. Association analysis using refined microsatellite markers localizes a susceptibility locus for psoriasis vulgaris within a 111 kb segment telomeric to the HLA-C gene. Hum. Mol. Genet. 8: 2165-2170.
5. Shiina, T., et al. 1999. Genome sequencing analysis of the 1.8 Mb entire human MHC class I region. Immunol. Rev. 167: 193-199.
6. Teraoka, Y., et al. 2000. Genetic polymorphisms in the cell growth regulated gene, SC1 telomeric of the HLA-C gene and lack of association of psoriasis vulgaris. Tissue Antigens 55: 206-211.
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CHROMOSOMAL LOCATION

Genetic locus: Tcf19 (mouse) mapping to 17 B1.

PRODUCT

TCF-19 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see TCF-19 shRNA Plasmid (m): sc-63114-SH and TCF-19 shRNA (m) Lentiviral Particles: sc-63114-V as alternate gene silencing products.

For independent verification of TCF-19 (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-63114A, sc-63114B and sc-63114C.

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 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

TCF-19 siRNA (m) is recommended for the inhibition of TCF-19 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.

GENE EXPRESSION MONITORING

TCF-19 (H-2): sc-390923 is recommended as a control antibody for monitoring of TCF-19 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor TCF-19 gene expression knockdown using RT-PCR Primer: TCF-19 (m)-PR: sc-63114-PR (20 µl). 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.