SANTA CRUZ BIOTECHNOLOGY, INC.

BC016579 siRNA (m): sc-141508

BACKGROUND

BC016579, also known as TPA-induced transmembrane protein homolog, is a 218 amino acid single-pass type I membrane protein. The gene encoding BC016579 maps to mouse chromosome 16 B5. The human homolog to BC016579, known as TTMP (TPA-induced transmembrane protein) or C3orf52, is a 217 amino acid single-pass membrane protein that localizes to the endoplasmic reticulum. TTMP is up-regulated following treatment with 12-O-tetradecanoylphorbol-13-acetate (TPA) in the pancreatic cancer cell line CD18. The up-regulation by TPA is triggered at the promoter level. The TTMP protein shares 68% amino acid identity with the mouse homolog. Existing as three alternatively spliced isoforms, the TTMP gene is conserved in chimpanzee, canine, bovine, mouse, rat and chicken, and maps to human chromosome 3q13.2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: BC016579 (mouse) mapping to 16 B5.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

PRODUCT

BC016579 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 BC016579 shRNA Plasmid (m): sc-141508-SH and BC016579 shRNA (m) Lentiviral Particles: sc-141508-V as alternate gene silencing products.

For independent verification of BC016579 (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-141508A, sc-141508B and sc-141508C.

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

BC016579 siRNA (m) is recommended for the inhibition of BC016579 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.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor BC016579 gene expression knockdown using RT-PCR Primer: BC016579 (m)-PR: sc-141508-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.