SANTA CRUZ BIOTECHNOLOGY, INC.

BC006779 siRNA (m): sc-141497

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BACKGROUND

BC006779, also known as mPDIP1 (PPAR γ-DNA-binding domain interacting protein1), Pric285, RP23-401M24.3, MGC63178 or mKIAA1769, is a 2,947 amino acid protein and mouse homolog of human PRIC285 (peroxisomal proliferator-activated receptor A-interacting complex 285 kDa protein). PRIC285 is a nuclear helicase protein that may be a part of the peroxisome proliferator activated receptor α interacting (PRIC) complex. PRIC285 acts as a transcriptional co-activator for many nuclear receptors, such as RXRα, TRα1, TRβ1, PPARα and PPARγ. PRIC285 contains a zinc finger and five LXXLL motifs, which are associated with protein-protein interactions during transcription regulation, however these motifs are not required for interaction with PPARγ. BC006779 is encoded by a gene located on murine chromosome 2 H4.

REFERENCES

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2. Latruffe, N. and Vamecq, J. 1997. Peroxisome proliferators and peroxisome proliferator activated receptors (PPARs) as regulators of lipid metabolism. Biochimie 79: 81-94.
3. Qi, C., Zhu, Y. and Reddy, J.K. 2000. Peroxisome proliferator-activated receptors, coactivators, and downstream targets. Cell Biochem. Biophys. 32: 187-204.
4. Surapureddi, S., et al. 2002. Identification of a transcriptionally active peroxisome proliferator-activated receptor α-interacting cofactor complex in rat liver and characterization of PRIC285 as a coactivator. Proc. Natl. Acad. Sci. USA 99: 11836-11841.
5. Plevin, M.J., et al. 2005. The LxxLL motif: a multifunctional binding sequence in transcriptional regulation. Trends Biochem. Sci. 30: 66-69.
6. Wang, Y., et al. 2006. Tyrosine phosphorylated Par3 regulates epithelial tight junction assembly promoted by EGFR signaling. EMBO J. 25: 5058-5070.
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CHROMOSOMAL LOCATION

Genetic locus: BC006779 (mouse) mapping to 2 H4.

PRODUCT

BC006779 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 BC006779 shRNA Plasmid (m): sc-141497-SH and BC006779 shRNA (m) Lentiviral Particles: sc-141497-V as alternate gene silencing products.

For independent verification of BC006779 (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-141497A, sc-141497B and sc-141497C.

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

BC006779 siRNA (m) is recommended for the inhibition of BC006779 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 BC006779 gene expression knockdown using RT-PCR Primer: BC006779 (m)-PR: sc-141497-PR (20 µl, 581 bp). 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.