PRIC285 siRNA (h): sc-76246



The Power to Question

BACKGROUND

PRIC285 (peroxisomal proliferator-activated receptor A-interacting complex 285 kDa protein), also known as PPAR- γ DNA-binding domain-interacting protein 1 (PDIP1), is a 2,649 amino acid 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 RXR α , TR α 1, TR β 1, PPAR α and PPAR γ . 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 PPAR γ . PRIC285 is expressed in skeletal muscle, spleen, colon, liver, heart, pancreas, lung, kidney, placenta and peripheral blood lymphocytes. There are three isoforms of PRIC285 that are produced as a result of alternative splicing events.

REFERENCES

- Green, S. 1995. PPAR: a mediator of peroxisome proliferator action. Mutat. Res. 333: 101-109.
- Latruffe, N. and Vamecq, J. 1997. Peroxisome proliferators and peroxisome proliferator activated receptors (PPARs) as regulators of lipid metabolism. Biochimie 79: 81-94.
- 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., Yu, S., Bu, H., Hashimoto, T., Yeldandi, A.V., Kashireddy, P., Cherkaoui-Malki, M., Qi, C., Zhu, Y.J., Rao, M.S. and Reddy, J.K. 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.
- Plevin, M.J., Mills, M.M. and Ikura, M. 2005. The LxxLL motif: a multifunctional binding sequence in transcriptional regulation. Trends Biochem. Sci. 30: 66-69.
- Wang, Y., Du, D., Fang, L., Yang, G., Zhang, C., Zeng, R., Ullrich, A., Lottspeich, F. and Chen, Z. 2006. Tyrosine phosphorylated Par3 regulates epithelial tight junction assembly promoted by EGFR signaling. EMBO J. 25: 5058-5070.
- Tomaru, T., Satoh, T., Yoshino, S., Ishizuka, T., Hashimoto, K., Monden, T., Yamada, M. and Mori, M. 2006. Isolation and characterization of a transcriptional cofactor and its novel isoform that bind the deoxyribonucleic acid-binding domain of peroxisome proliferator-activated receptor-γ. Endocrinology 147: 377-388.
- 8. Sarkar, J., Qi, C., Guo, D., Ahmed, M.R., Jia, Y., Usuda, N., Viswakarma, N., Rao, M.S. and Reddy, J.K. 2007. Transcription coactivator PRIP, the peroxisome proliferator-activated receptor (PPAR)-interacting protein, is redundant for the function of nuclear receptors $PPar\alpha$ and CAR, the constitutive androstane receptor, in mouse liver. Gene Expr. 13: 255-269.
- 9. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 611265. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: HELZ2 (human) mapping to 20q13.33.

PRODUCT

PRIC285 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see PRIC285 shRNA Plasmid (h): sc-76246-SH and PRIC285 shRNA (h) Lentiviral Particles: sc-76246-V as alternate gene silencing products.

For independent verification of PRIC285 (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-76246A, sc-76246B and sc-76246C.

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

PRIC285 siRNA (h) is recommended for the inhibition of PRIC285 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 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 PRIC285 gene expression knockdown using RT-PCR Primer: PRIC285 (h)-PR: sc-76246-PR (20 μ l). 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.

.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**