

PITPNC1 siRNA (m): sc-152279

BACKGROUND

PITPNC1 (phosphatidylinositol transfer protein, cytoplasmic 1), also known as RDGB- β (retinal degeneration B homolog β) or M-rdgb β (mammalian rdgb homolog β), is a 332 amino acid protein belonging to the PtdIns transfer protein family and the PI transfer class IIB subfamily. Localizing to cytoplasm, PITPNC1 is ubiquitously expressed, with highest expression in heart, muscle, kidney, liver and peripheral blood leukocytes, and exists as two alternatively spliced isoforms. Similar to other RDGB-like proteins, PITPNC1 contains an N-terminal PITP-like domain and a short C-terminal domain. In contrast to other RDGB-like proteins, PITPNC1 does not contain transmembrane domains or the conserved C-terminal domain. Mediating monomeric lipid transport, PITPNC1 shields lipids from the aqueous environment and binds them in a hydrophobic cavity. The gene that encodes PITPNC1 maps to human chromosome 17q24.2.

REFERENCES

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3. Saarela, J., et al. 2006. PRKCA and multiple sclerosis: association in two independent populations. *PLoS Genet.* 2: e42.
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7. Vital, A.L., et al. 2010. Gene expression profiles of human glioblastomas are associated with both tumor cytogenetics and histopathology. *Neuro Oncol.* 12: 991-1003.
8. Jensen, L.R., et al. 2010. A distinctive gene expression fingerprint in mentally retarded male patients reflects disease-causing defects in the histone demethylase KDM5C. *Pathogenetics* 3: 2.
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CHROMOSOMAL LOCATION

Genetic locus: *Pitpnc1* (mouse) mapping to 11 E1.

PROTOCOLS

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

PRODUCT

PITPNC1 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 PITPNC1 shRNA Plasmid (m): sc-152279-SH and PITPNC1 shRNA (m) Lentiviral Particles: sc-152279-V as alternate gene silencing products.

For independent verification of PITPNC1 (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-152279A, sc-152279B and sc-152279C.

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

PITPNC1 siRNA (m) is recommended for the inhibition of PITPNC1 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 PITPNC1 gene expression knockdown using RT-PCR Primer: PITPNC1 (m)-PR: sc-152279-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.