PITPNC1 (E-20): sc-243800



The Power to Question

BACKGROUND

PITPNC1 (phosphatidylinositol transfer protein, cytoplasmic 1), also known as RDGB-BETA (retinal degeneration B homolog beta) 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

- 1. Chen, D.C., et al. 2004. Segmental duplications flank the multiple sclerosis locus on chromosome 17q. Genome Res. 14: 1483-1492.
- Atayar, C., et al. 2006. BCL6 alternative breakpoint region break and homozygous deletion of 17q24 in the nodular lymphocyte predominance type of Hodqkin's lymphoma-derived cell line DEV. Hum. Pathol. 37: 675-683.
- 3. Saarela, J., et al. 2006. PRKCA and multiple sclerosis: association in two independent populations. PLoS Genet. 2: e42.
- Funari, V.A., et al. 2007. Cartilage-selective genes identified in genome-scale analysis of non-cartilage and cartilage gene expression. BMC Genomics 8: 165.
- 5. Rohrbeck, A., et al. 2009. Cancer genomics identifies regulatory gene networks associated with the transition from dysplasia to advanced lung adenocarcinomas induced by c-Raf-1. PLoS ONE 4: e7315.
- 6. Gupta, J., et al. 2010. Hepatic expression profiling shows involvement of PKC ϵ , DGK η , Tnfaip, and Rho kinase in type 2 diabetic nephropathy rats. J. Cell. Biochem. 111: 944-954.
- 7. Vital, A.L., et al. 2010. Gene expression profiles of human glioblastomas are associated with both tumor cytogenetics and histopathology. Neuro-oncology 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.
- 9. Jakubiczka, S., et al. 2010. Translocation and deletion around SOX9 in a patient with acampomelic campomelic dysplasia and sex reversal. Sex. Dev. 4: 143-149.

CHROMOSOMAL LOCATION

Genetic locus: PITPNC1 (human) mapping to 17q24.2; Pitpnc1 (mouse) mapping to 11 E1.

SOURCE

PITPNC1 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PITPNC1 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-243800 P, ($100 \mu g$ peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PITPNC1 (E-20) is recommended for detection of PITPNC1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PITPNC1 (E-20) is also recommended for detection of PITPNC1 in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for PITPNC1 siRNA (h): sc-94225, PITPNC1 siRNA (m): sc-152279, PITPNC1 shRNA Plasmid (h): sc-94225-SH, PITPNC1 shRNA Plasmid (m): sc-152279-SH, PITPNC1 shRNA (h) Lentiviral Particles: sc-94225-V and PITPNC1 shRNA (m) Lentiviral Particles: sc-152279-V.

Molecular Weight of PITPNC1 isoforms: 38/32 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

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

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