

PIS1 (Q-18): sc-139417

BACKGROUND

PIS1, also known as CDIPT (CDP-diacylglycerol—inositol 3-phosphatidyltransferase) or PIS (phosphatidylinositol synthase), is a 213 amino acid multi-pass membrane protein that belongs to the CDP-alcohol phosphatidyltransferase class-I family and exists as two alternatively spliced isoforms. Localizing to Golgi apparatus and the cytoplasmic side of endoplasmic reticulum, PIS1 is widely expressed, with highest expression in adult liver and skeletal muscle. PIS1 catalyzes the biosynthesis of phosphatidylinositol (PtdIns), as well as the PtdIns-inositol exchange reaction, which is due to the reverse reaction of PtdIns synthase and is CMP-dependent. PIS1 may also reduce excessive cellular PtdIns. Highly conserved in yeast and mammals, PIS1 is encoded by a gene that maps to human chromosome 16p11.2.

CHROMOSOMAL LOCATION

Genetic locus: CDIPT (human) mapping to 16p11.2; Cdipt (mouse) mapping to 7 F3.

SOURCE

PIS1 (Q-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of PIS1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139417 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

PIS1 (Q-18) is recommended for detection of PIS1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PIS1 (Q-18) is also recommended for detection of PIS1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PIS1 siRNA (h): sc-93119, PIS1 siRNA (m): sc-152276, PIS1 shRNA Plasmid (h): sc-93119-SH, PIS1 shRNA Plasmid (m): sc-152276-SH, PIS1 shRNA (h) Lentiviral Particles: sc-93119-V and PIS1 shRNA (m) Lentiviral Particles: sc-152276-V.

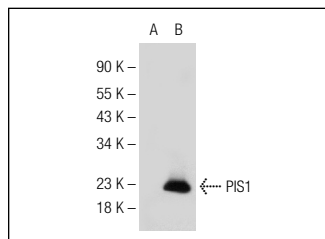
Molecular Weight of PIS1 isoforms: 24/19 kDa.

Positive Controls: PIS1 (m): 293T Lysate: sc-127338.

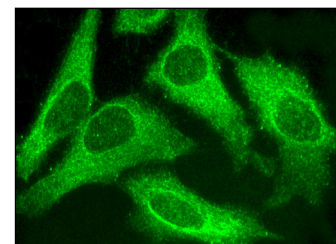
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



PIS1 (Q-18): sc-139417. Western blot analysis of PIS1 expression in non-transfected: sc-117752 (A) and mouse PIS1 transfected: sc-127338 (B) 293T whole cell lysates.



PIS1 (Q-18): sc-139417. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

PROTOCOLS

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



Try **PIS1 (C-2): sc-514255** or **PIS1 (D-1): sc-514565**, our highly recommended monoclonal alternatives to PIS1 (Q-18).