**BACKGROUND**

PIS1, also known as CDIPT (CDP-diacylglycerol—inositol 3-phosphatidyltrans-ferase) 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 2 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-insitol exchange reaction, which is due to the reverse reaction of PtdIns synthase and is CMP-dependent. PIS1 may also reduce excessive the PtdIns-inositolexchange reaction, which is due to the reverse reaction of PtdIns synthase and is CMP-dependent. PIS1 may also reduce excessive.

**APPLICATIONS**

PIS1 (C-2) is recommended for detection of PIS1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)), 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).

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 Plasmid (r): sc-270262-SH, PIS1 shRNA (h) Lentiviral Particles: sc-93119-V, PIS1 shRNA (m) Lentiviral Particles: sc-152276-V and PIS1 shRNA (r) Lentiviral Particles: sc-270262-V.

Molecular Weight of PIS1 isoforms: 24/19 kDa.


**REFERENCES**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

PIS1 (C-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 55-78 within an internal region of PIS1 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG₂κ light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

PIS1 (C-2) is available conjugated to agarose (sc-514255 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514255 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514255 PE), fluorescein (sc-514255 FITC), Alexa Fluor® 488 (sc-514255 AF488), Alexa Fluor® 546 (sc-514255 AF546), Alexa Fluor® 594 (sc-514255 AF594) or Alexa Fluor® 647 (sc-514255 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514255 AF680) or Alexa Fluor® 790 (sc-514255 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514255 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**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.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.