

GPI-PLD (N-19): sc-9515

BACKGROUND

PLD, phospholipase D, produces phosphatidic acid through hydrolysis of phospholipids. Phosphatidic acid is involved in intracellular and extracellular signaling as a mediator of vesicular trafficking and as a key intermediate in glycerolipid metabolism and membrane remodeling. PLD is activated by at least three distinct pathways: a protein kinase C-mediated pathway, a tyrosine kinase-mediated pathway, and by direct interaction with a GTP-binding protein. PLD is expressed as two distinct isoenzymes in mammalian cells, membrane-bound and cytosolic. The membrane-bound isoenzyme prefers phosphatidylcholine as a substrate, whereas the cytosolic isoenzyme hydrolyzes phosphatidylethanolamine or phosphatidylinositol.

REFERENCES

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3. Huang, C., et al. 1992. Identification of phosphatidylcholine-selective and phosphatidylinositol-selective phospholipases D in Madin-Darby canine kidney cells. *J. Biol. Chem.* 267: 16859-16865.
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6. English, D. 1996. Phosphatidic acid: a lipid messenger involved in intracellular and extracellular signaling. *Cell Signal* 8: 341-347.
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SOURCE

GPI-PLD (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GPI-PLD of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-9515 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.

APPLICATIONS

GPI-PLD (N-19) is recommended for detection of GPI-PLD 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).

Suitable for use as control antibody for GPI-PLD siRNA (h): sc-43811, GPI-PLD siRNA (m): sc-41625, GPI-PLD shRNA Plasmid (h): sc-43811-SH, GPI-PLD shRNA Plasmid (m): sc-41625-SH, GPI-PLD shRNA (h) Lentiviral Particles: sc-43811-V and GPI-PLD shRNA (m) Lentiviral Particles: sc-41625-V.

Molecular Weight of GPI-PLD: 110 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.

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.



Try **GPI-PLD (D-10): sc-365096** or **GPI-PLD (E-8): sc-365037**, our highly recommended monoclonal alternatives to GPI-PLD (N-19).