SANTA CRUZ BIOTECHNOLOGY, INC.

GPI-PLD (38A1): sc-69780

BACKGROUND

Phosphatidylinositol-glycan-specific phospholipase D (GPI-PLD) is a high-density lipoprotein-associated protein found on chromosome 6p22 that specifically hydrolyzes the inositol phosphate linkage in proteins anchored by phosphatidylinositol-glycans (PI-Gs). GPI-PLD is found in serum, liver, cerebrospinal fluid and in milk. The majority of plasma GPI-PLD appears to be specifically associated with a small, discrete and minor fraction of lipoproteins containing apoA-I and apoA-IV. Serum GPI-PLD activity is reduced over 75% in systemic inflammatory response syndrome and the downregulation of GPI-PLD could play an important role in the control of proinflammatory responses.

REFERENCES

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3. Hoener, M.C. and Brodbeck, U. 1992. Phosphatidylinositol-glycan-specific phospholipase D is an amphiphilic glycoprotein that in serum is associated with high-density lipoproteins. Eur. J. Biochem. 206: 747-757.
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5. Deeg, M.A., Bowen, R.F., Williams, M.D., Olson, L.K., Kirk, E.A. and LeBoeuf, R.C. 2001. Increased expression of GPI-specific phospholipase D in mouse models of type 1 diabetes. Am. J. Physiol. Endocrinol. Metab. 281: 147-154.
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7. Du, X. and Low, M.G. 2001. Downregulation of glycosylphosphatidylinositol-specific phospholipase D induced by lipopolysaccharide and oxidative stress in the murine monocyte-macrophage cell line RAW 264.7. Infect. Immun. 69: 3214-3223.

CHROMOSOMAL LOCATION

Genetic locus: GPLD1 (human) mapping to 6p22.2.

SOURCE

GPI-PLD (38A1) is a mouse monoclonal antibody raised against purified GPI-PLD of human origin.

STORAGE

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

PRODUCT

Each vial contains 100 µg IgG1 in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

GPI-PLD (38A1) is recommended for detection of GPI-PLD of human origin by Western Blotting (starting dilution 1:200, 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), immunohistochemistry (including paraffin-embedded sections) (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 shRNA Plasmid (h): sc-43811-SH and GPI-PLD shRNA (h) Lentiviral Particles: sc-43811-V.

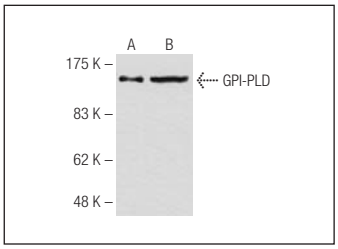
Molecular Weight of GPI-PLD: 110 kDa.

Positive Controls: human plasma.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2050 or ABC: sc-2017 mouse IgG Staining Systems.

DATA



GPI-PLD (38A1): sc-69780. Western blot analysis of GPI-PLD purified from human plasma (**A**) and in human plasma (**B**).

RESEARCH USE

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