

GPI-PLD (15): sc-135930

BACKGROUND

Phosphatidylinositol-glycan-specific phospholipase D (GPI-PLD) is a high-density lipoprotein-associated protein found on chromosome 6p22.2 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.
4. Scallion, B.J., Kado-Fong, H., Nettleton, M.Y. and Kochan, J.P. 1992. A novel strategy for secreting proteins: use of phosphatidylinositol-glycan-specific phospholipase D to release chimeric phosphatidylinositol-glycan anchored proteins. *Biotechnology* 10: 550-556.
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.
6. Deeg, M.A., Bierman, E.L. and Cheung, M.C. 2001. GPI-specific phospholipase D associates with an apoA^I and apoA-IV-containing complex. *J. Lipid Res.* 42: 442-451.
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 6p22.3.

SOURCE

GPI-PLD (15) is a mouse monoclonal antibody raised against amino acids 706-841 of GPI-PLD of human origin.

PRODUCT

Each vial contains 50 µg IgG₁ in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

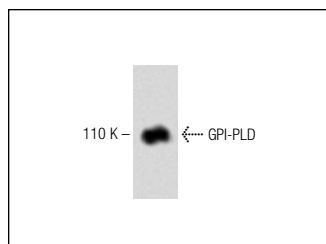
GPI-PLD (15) is recommended for detection of GPI-PLD of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500); not recommended for immunoprecipitation.

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.

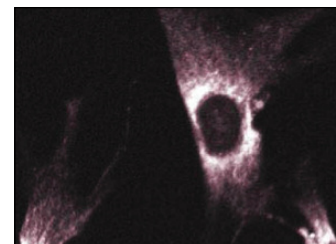
Molecular Weight of GPI-PLD: 110 kDa.

Positive Controls: human plasma extract: sc-364374 or Caki-1 cell lysate: sc-2224.

DATA



GPI-PLD (15): sc-135930. Western blot analysis of GPI-PLD in human plasma.



GPI-PLD (15): sc-135930. Immunofluorescence staining of WI-38 cells showing cytoplasmic localization.

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. Not for resale.

PROTOCOLS

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