

GPI-PLD (m): 293T Lysate: sc-120582

BACKGROUND

Phosphatidylinositol-glycan-specific phospholipase D (GPI-PLD) is a high-density lipoprotein-associated protein found on chromosome 6p22.3 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

1. Scallion, B.J., Fung, W.J., Tsang, T.C., Li, S., Kado-Fong, H., Huang, K.S. and Kochan, J.P. 1991. Primary structure and functional activity of a phosphatidylinositol-glycan-specific phospholipase D. *Science* 252: 446-448.
2. Stieger, S., Diem, S., Jakob, A. and Brodbeck, U. 1991. Enzymatic properties of phosphatidylinositol-glycan-specific phospholipase C from rat liver and phosphatidylinositol-glycan-specific phospholipase D from rat serum. *Eur. J. Biochem.* 197: 67-73.
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 (mouse) mapping to 13 A3.1.

PRODUCT

GPI-PLD (m): 293T Lysate represents a lysate of mouse GPI-PLD transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

GPI-PLD (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive GPI-PLD antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

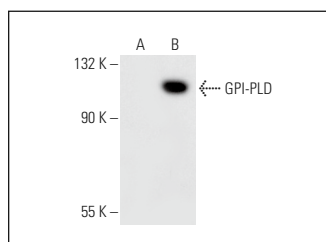
GPI-PLD (E-5): sc-365873 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse GPI-PLD expression in GPI-PLD transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

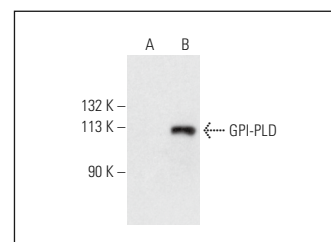
To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



GPI-PLD (E-5): sc-365873. Western blot analysis of GPI-PLD expression in non-transfected: sc-117752 (A) and mouse GPI-PLD transfected: sc-120582 (B) 293T whole cell lysates.



GPI-PLD (D-10): sc-365096. Western blot analysis of GPI-PLD expression in non-transfected: sc-117752 (A) and mouse GPI-PLD transfected: sc-120582 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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