



Anti-human PLA2G16 Antibody

ORDERING INFORMATION

Catalog Number: AF6190

Lot Number: CDZP01

Size: 100 µg

Formulation: 0.2 µm filtered solution in PBS with 5% trehalose

Storage: -20° C

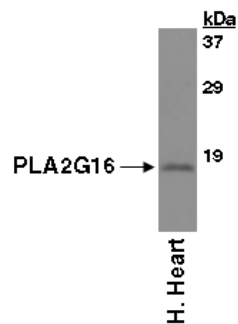
Reconstitution: sterile PBS

Specificity: human PLA2G16

Immunogen: *E. coli*-derived rhPLA2G16

Ig Type: sheep IgG

Applications: Western blot
Direct ELISA



Detection of PLA2G16 with AF6190.

Tissue lysates were resolved by SDS-PAGE, transferred to an Immobilon-P membrane and immunoblotted with 1.0 µg/mL sheep anti-hPLA2G16.

Background

PLA2G16 (Group 16 phospholipase A2; also HREV107 and AdPLA) is a Ca⁺⁺-dependent 17 - 18 kDa member of the H-rev107 family of molecules. It is expressed intracellularly by white adipocytes, induced by insulin, and generates arachadonic acid from phospholipids. The arachadonic acid is converted to PGE₂, which binds the EP3 receptor and decreases cAMP levels. This results in decreased hormone-sensitive lipase activity and increased adiposity. Human PLA2G16 is 162 amino acids (aa) in length. It is associated with both membranes and cytosol, and may possess a transmembrane segment between aa 134 - 154. The enzymatic activity resides in His23 and Cys113. There is one potential isoform that shows a 20 aa substitution for the first four amino acids. Over aa 12 - 132, human PLA2G16 shares 88 % aa identity with mouse PLA2G16.

Preparation

Produced in sheep immunized with purified, *E. coli*-derived, recombinant human PLA2G16 (rhPLA2G16; Asp12 - Asp132; Accession # P53816). Human PLA2G16 specific IgG was purified by human PLA2G16 affinity chromatography.

Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 mg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a **manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity

This antibody has been selected for its ability to recognize human PLA2G16 in direct ELISAs and Western blots.

Applications

Western blot - An antibody concentration of 1.0 µg/mL is recommended.

Direct ELISA - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human PLA2G16. The detection limit for rhPLA2G16 is approximately 0.5 ng/well.

Optimal dilutions should be determined by each laboratory for each application.

FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

R&D Systems, Inc.
1-800-343-7475

5/27/10