



Recombinant Protein Technical Manual

Recombinant Human PLA2G7/Lp-PLA2 Protein (His Tag)(Active)

RPES0426

Product Data:

Product SKU: RPES0426

Size: 10µg

Species: Human

Expression host: HEK293 Cells

Uniprot: Q13093

Protein Information:

Molecular Mass: 49.2 kDa

AP Molecular Mass: 50-55 kDa

Tag: C-His

Bio-activity: Measured by its ability to cleave a colorimetric peptide substrate, 1O-hexadecyl-2-deoxy-2-thio Sacetylsnglyceryl-3-phosphoryl choline (2-Thio-PAF), in the presence of 5, 5'Dithiobis(2-nitrobenzoic acid) (DTNB). The specific activity is >5000 pmoles/min/µg.

Purity: > 88 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 50mM NaAc, 150mM NaCl, 10% glycerol, pH 5.0

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: 2-acetyl-alkylglycerophosphocholine esterase; EC 3.1.1; EC 3.1.1.47;1-alkyl-2-acetyl-glycerophosphocholine esterase; Group-VIIA phospholipase A2; gVIIA-PLA2; LDL-associated phospholipase A2; LDL-PLA(2); LDL-PLA2; lipoprotein-associated phospholipase A2; LpPLA2; Lp-PLA2; PAF acetylhydrolase; PAF-AH; PAF-AHPAF 2-

acylhydrolase; phospholipase A2; group VII (platelet-activating factor
acetylhydrolase; PLA2G7; plasma); platelet-activating factor acetylhydrolase

Immunogen Information:

Sequence: Met 1-Asn 441

Background:

Platelet-activating factor acetylhydrolase, also known as 1-alkyl-2-acetyl-glycerophosphocholine esterase, 2-acetyl-alkylglycero-phosphocholine esterase, Group-VIIA phospholipase A2, LDL-associated phospholipase A2, PAF 2-acylhydrolase, PLA2G7 and PAFAH, is secreted protein which belongs to the AB hydrolase superfamily and Lipase family. PLA2G7 / PAFAH modulates the action of platelet-activating factor (PAF) by hydrolyzing the sn-2 ester bond to yield the biologically inactive lyso-PAF. It has a specificity for substrates with a short residue at the sn-2 position. It is inactive against long-chain phospholipids. PLA2G7 / PAFAH is a potent pro- and anti-inflammatory molecule that has been implicated in multiple inflammatory disease processes, including cardiovascular disease. PLA2G7 also represents an important, potentially functional candidate in the pathophysiology of coronary artery disease (CAD). Defects in PLA2G7 are the cause of platelet-activating factor acetylhydrolase deficiency (PLA2G7 deficiency). It is a trait which is present in 27% of Japanese. It could have a significant physiologic effect in the presence of inflammatory bodily responses.