Datasheet for ABIN7196844

PLA2G7 Protein (His tag)

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Overview

Quantity:	50 µg
Target:	PLA2G7 (Lp-PLA2)
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This PLA2G7 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human PLA2G7/Lp-PLA2 Protein (His Tag)(Active)
Sequence:	Met 1-Asn 441
Characteristics:	A DNA sequence encoding the human PLA2G7 (Q13093-1) precursor (Met 1-Asn 441) was expressed, with a C-terminal polyhistidine tag.
Purity:	> 88 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	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.

Target Details

Target:	PLA2G7 (Lp-PLA2)

Target Details

Alternative Name:	PLA2G7/Lp-PLA2 (Lp-PLA2 Products)
Background:	Background: Platelet-activating factor acetylhydrolase; also known as 1-alkyl-2-acetylglycerophosphocholine esterase; 2-acetyl-1-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. Synonym: 2-acetyl-1-alkylglycerophosphocholine esterase; EC 3.1.1; EC 3.1.1.47;1-alkyl-2-acetylglycerophosphocholine 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; PAFAHPAF 2-acylhydrolase; phospholipase A2; group VII (platelet-activating factor acetylhydrolase; PLA2G7; plasma); platelet-activating factor acetylhydrolase
Molecular Weight:	49.2 kDa
Pathways:	Peptide Hormone Metabolism

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile 50 mM NaAc, 150 mM NaCl, 10 % glycerol, pH 5.0
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Handling

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.