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

Catalog Number: PKSH031390



Note: Centrifuge before opening to ensure complete recovery of vial contents.

### **Description**

**Synonyms** 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

Species Human

Expression Host

Sequence

Met 1-Asn 441

Accession

Q13093-1

Calculated Molecular Weight

Observed molecular weight

Tag

HEK293 Cells

Met 1-Asn 441

49.2 kDa

50-55 kDa

C-His

**Bioactivity** Measured by its ability to cleave a colorimetric peptide substrate, 10-

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.

#### **Properties**

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

**Endotoxin** < 1.0 EU per  $\mu g$  of the protein as determined by the LAL method.

**Storage** Generally, 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

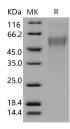
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

protectants before lyophilization.

Please refer to the specific buffer information in the printed manual.

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

#### Data



> 88 % as determined by reducing SDS-PAGE.

#### For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017

Web: <a href="mailto:www.elabscience.com">www.elabscience.com</a>
Email: <a href="mailto:techsupport@elabscience.com">techsupport@elabscience.com</a>

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

Catalog Number:PKSH031390



### **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.

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017

Web: <u>www.elabscience.com</u> Email: <u>techsupport@elabscience.com</u>