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# **Recombinant Mouse PLA2G2E Protein (His Tag)**

Catalog No. PKSM040548

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

## **Description**

SynonymsPLA2G2ESpeciesMouse

Expression Host HEK293 Cells
Sequence Met 1-Cys 142
Accession Q9QUL3
Calculated Molecular Weight 15.5 kDa
Observed molecular weight 18 kDa
Tag C-His

**Bioactivity** Not validated for activity

### **Properties**

**Purity** > 97 % as determined by reducing SDS-PAGE.

**Endotoxin** < 1.0 EU per µg 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 PBS, 10% glycerol, pH 7.4

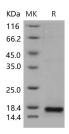
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

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



> 97 % as determined by reducing SDS-PAGE.

# **Background**

Group IIE secretory phospholipase A2, also known as GIIE sPLA2, sPLA2-IIE, Phosphatidylcholine 2-acylhydrolase 2E and PLA2G2E is a secreted protein which belongs to the phospholipase A2 family. Mammalian secretory phospholipase

### For Research Use Only

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### **Elabscience Bionovation Inc.**



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A2s (sPLA2s) form a family of structurally related enzymes that are involved in a variety of physiological and pathological processes via the release of arachidonic acid from membrane phospholipids or the binding to specific membrane receptors. Phospholipases A2 / PLA2 are enzymes that release fatty acids from the second carbon group of glycerol. This particular phospholipase specifically recognizes the sn-2 acyl bond of phospholipids and catalytically hydrolyzes the bond releasing arachidonic acid and lysophospholipids. Phospholipases A2 / PLA2 are commonly found in mammalian tissues as well as insect and snake venom. Venom from both snakes and insects is largely composed of melittin, which is a stimulant of Phospholipases A2 / PLA2. Due to the increased presence and activity of Phospholipases A2 / PLA2 resulting from a snake or insect bite, arachidonic acid is released from the phospholipid membrane disproportionately. As a result, inflammation and pain occur at the site. PLA2G2E catalyzes the calcium-dependent hydrolysis of the 2-acyl groups in 3-sn-phosphoglycerides. Has a preference for arachidonic-containing phospholipids.

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