



Recombinant Protein Technical Manual

Recombinant Mouse PLA2G2E Protein (His Tag)

RPES0253

Product Data:

Product SKU: RPES0253

Size: 20µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: Q9QUL3

Protein Information:

Molecular Mass: 15.5 kDa

AP Molecular Mass: 18 kDa

Tag: C-His

Bio-activity:

Purity: > 97 % as determined by 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 PBS, 10% glycerol, pH 7.4

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

Application:

Synonyms: PLA2G2E

Immunogen Information:

Sequence: Met 1-Cys 142

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 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.