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# Recombinant Human PLA2G1B/PLA2 Protein (His Tag)

Catalog Number: PKSH032899

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

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Species Human

Source HEK293 Cells-derived Human PLA2G1B; PLA2 protein Ala23-Ser148, with an C-

terminal His

Calculated MW15.2 kDaObserved MW17-20 kDaAccessionP04054

**Bio-activity** Not validated for activity

### **Properties**

**Purity** > 95 % as determined by reducing SDS-PAGE.

**Concentration** Subject to label value.

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

**Storage** Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

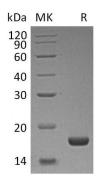
**Shipping** This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel

packs. Upon receipt, store it immediately at < - 20°C.

Formulation Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, 10% Glycerol,

pH 8.0.

### Data



> 95 % as determined by reducing SDS-PAGE.

## Background

Phospholipase A2(PLA2G1B) is a secreted protein which belongs to the phospholipase A2 family. It catalyzes the release of fatty acids from glycero-3-phosphocholines. It catalyzes the calcium-dependent hydrolysis of the 2-acyl groups in 3-sn-phosphoglycerides. This releases glycerophospholipids and arachidonic acid that serve as the precursors of signal molecules. Sequences of pancreatic PLA2G1B enzymes from a variety of mammals have been reported. One striking feature of these enzymes is their close homology to venom phospholipases of snakes. Mice lacking in PLA2G1B are resistant to obesity and diabetes induced by feeding a diabetogenic high-fat/high-carbohydrate diet. Oral supplementation of a diabetogenic diet with the PLA2G1B inhibitor methyl indoxam effectively suppresses die t-induced obesity and diabetes. PLA2G1B inhibition may be a potentially effective oral therapeutic option for treatment of obesity and diabetes.

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