



# Recombinant Protein Technical Manual

## Recombinant Human PLA2G1B/PLA2 Protein (His Tag)

RPES2022

### Product Data:

**Product SKU:** RPES2022

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** P04054

### Protein Information:

**Molecular Mass:** 15.2 kDa

**AP Molecular Mass:** 17 kDa

**Tag:** C-6His

**Bio-activity:**

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

**Endotoxin:** < 1.0 EU per µg 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 TrisHCl, 150mM NaCl, 10% Glycerol, pH8.0.

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

**Application:**

**Synonyms:** PLA2G1B; Phospholipase A2; Group IB phospholipase A2; PLA2; PLA2A; PPLA2

## Immunogen Information:

**Sequence:** Ala23-Ser148

## Background:

Phospholipase A2(PLA2G1B) is a secreted protein which belongs to the phospholipase A2 family. It catalyzes the release of fatty acids from glycerol-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 diet-induced obesity and diabetes. PLA2G1B inhibition may be a potentially effective oral therapeutic option for treatment of obesity and diabetes.