

# Mouse PLA2G1B / Phospholipase-A2 Protein (His Tag)

Catalog Number: 50329-M08H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

Pla2a; sPLA2IB

### Protein Construction:

A DNA sequence encoding the mouse PLA2G1B (NP\_035237.1) extracellular domain (Met 1-Cys 146) was fused with a polyhistidine tag at the C-terminus.

**Source:** Mouse

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 96 % as determined by SDS-PAGE

### Endotoxin:

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

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Ala 16

### Molecular Mass:

The secreted recombinant mouse PLA2G1B consists of 142 amino acids and has a predicted molecular mass of 16.3 kDa. rmPLA2G1B migrates as an approximately 18 kDa band in SDS-PAGE under reducing conditions.

### Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

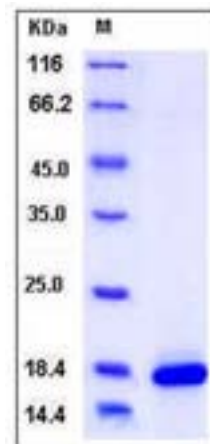
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

phospholipase A2, also known as Phosphatidylcholine 2-acylhydrolase 1B, Group IB phospholipase A2, PLA2 and PLA2G1B, is a secreted protein which belongs to the phospholipase A2 family. Phospholipase A2 / PLA2G1B catalyzes the release of fatty acids from glycerol-3-phosphocholines. The best known varieties are the digestive enzymes secreted as zymogens by the pancreas of mammals. Sequences of pancreatic Phospholipase A2 / 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. Other forms of Phospholipase A2 / PLA2G1B have been isolated from brain, liver, lung, spleen, intestine, macrophages, leukocytes, erythrocytes, inflammatory exudates, chondrocytes, and platelets. Mice lacking in Phospholipase A2 / 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.

## References

1.Labonté,E.D. et al., 2006, Diabetes. 55 (4) :935-41. 2.Mounier,C.M. et al.,2008, Br J Cancer. 98 (3):587-95. 3.Hui,D.Y. et al., 2009, Br J Pharmacol. 157 (7):1263-9.

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