

# Mouse PLA2G12B / PLA2G13 Protein (His Tag)

Catalog Number: 50689-M08H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

2010002E04Rik; Fksg71; hlb218; Pla2g13

### Protein Construction:

A DNA sequence encoding the mouse PLA2G12B (NP\_076019.2) (Met 1-Leu 195) was expressed, with a C-terminal polyhistidine tag.

**Source:** Mouse

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 95 % 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:** Gln 20

### Molecular Mass:

The secreted recombinant mouse PLA2G12B comprises 187 amino acids and has a calculated molecular mass of 21 kDa. The apparent molecular mass of the recombinant protein is approximately 24 kDa in SDS-PAGE under reducing conditions.

### Formulation:

Lyophilized from sterile 20mM NaAc, 100mM NaCl, pH 5.0

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:

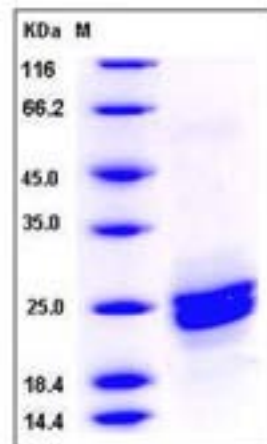
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

Group XIIIB secretory phospholipase A2-like protein, also known as Group XIII secretory phospholipase A2-like protein, GXIII sPLA2-like, sPLA2-GXIIIB, GXIIIB, PLA2G13 and PLA2G12B, is a secreted protein which belongs to the phospholipase A2 family. PLA2G12B / PLA2G13 is strong expression in liver, small intestine and kidney. 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.

## References

1.Dennis EA. et al.,1994, J. Biol. Chem. 269 (18): 13057-60. 2.Nicolas JP, et al.,1997, J. Biol. Chem. 272 (11): 7173-81. 3.Six DA, et al., 2000, Biochim. Biophys. Acta 1488 (1-2): 1-19.

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