www.neobiolab.com info@neobiolab.com 888.754.5670, +1 617.500.7103 United States 0800.088.5164, +44 020.8123.1558 United Kingdom

# SCIENTIFIC

## PLA2G12 Human

**Description:** Secreted Phospholipase A2-XII Human Recombiannt was produced with N-terminal His-Tag. PLA2G12 His-Tagged Fusion Protein is 20.6 kDa containing 167 amino acid residues of the human secreted phospholipase A2-XII and 16 additional amino acid residues. His-Tag (underlined). MRGSHHHHHHGMASHMQEQAQTTDWRATLKTIRNGVHKIDTYLNAALDLLGGEDG LCQYKCSDGSKPFPRYGYKPSPPNGCGSPLFGVHLNIGIPSLTKCCNQHDRCYETCGKSKNDCD EEFQYCLSKICRDVQKTLGLTQHVQACETTVELLFDSVIHLGCKPYLDSQRAACRCHYEEKTDL.

**Synonyms:**Group XIIA secretory phospholipase A2, EC 3.1.1.4, Phosphatidylcholine 2-acylhydrolase GXII, GXII sPLA2, PLA2G12, sPLA2-XII, PLA2G12A.

Source: Escherichia Coli.

Physical Appearance: Filtered White lyophilized (freeze-dried) powder.

Purity: Greater than 95% as determined by SDS PAGE.

#### Formulation:

Filtered (0.4

#### Stability:

Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C.

#### Usage:

NeoBiolab's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

## Applications:

Western blotting.

#### Solubility:

It is recommended to add deionized water to prepare a working stock solution of approximately 0.5mg/ml and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter the product by an appropriate sterile filter before using it on cell culture.

# Introduction:

Phospholipase A2 (PLA2) catalyzes the hydrolysis of the sn-2 position of membrane glycerophospholipids to liberate arachidonic acid (AA), a precursor of eicosanoids including prostaglandins and leukotrienes. The same reaction also produces lysophosholipids, which represent another class of lipid mediators. The secretory PLA2 (sPLA2) family, in which 10 isozymes have been identified, consists of low molecular weight, Ca2+-requiring secretory enzymes that have been implicated in a number of biological processes, such as modification of eicosanoid generation, inflammation, and host defense. This enzyme has been proposed to hydrolyze phosphatidylcholine (PC) in lipoproteins to liberate lyso- PC and free fatty acids in the arterial wall, thereby facilitating the accumulation of bioactive lipids and modified lipoproteins in atherosclerotic foci. In mice, sPLA2 expression significantly influences HDL particle size and composition and demonstrate that an induction of sPLA2 is required for the decrease in plasma







www.neobiolab.com info@neobiolab.com 888.754.5670, +1 617.500.7103 United States 0800.088.5164, +44 020.8123.1558 United Kingdom

HDL cholesterol in response to inflammatory stimuli. Instillation of bacteria into the bronchi was associated with surfactant degradation and a decrease in large:small ratio of surfactant



aggregates in rats.

Catalog #:ENPS-337

To place an order, please Click HERE.

For research use only.





