

## PLA2G2D

### Recombinant Human Secreted Phospholipase A2 Group IID His

<b>Catalog No.</b>	CSI12699 CSI12700 CSI12701	<b>Quantity:</b>	2 µg 10 µg 1.0 mg
<b>Alternate Names:</b>	Group IID secretory phospholipase A2, EC 3.1.1.4, Phosphatidylcholine 2-acylhydrolase GIID, GIID sPLA2, PLA2IID, sPLA(2)-IID, Secretory-type PLA, stroma-associated homolog, SPLASH, sPLA2S, PLA2G2D.		
<b>Description:</b>	<p>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 lysophospholipids, which represent another class of lipid mediators.</p> <p>The secretory PLA2 (sPLA2) family, in which 10 isozymes have been identified, consists of low molecular weight, Ca<sup>2+</sup>-requiring secretory enzymes that have been implicated in a number of biological processes, such as modification of eicosanoid generation, inflammation, and host defense.</p> <p>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 HDL cholesterol in response to inflammatory stimuli. Installation of bacteria into the bronchi was associated with surfactant degradation and a decrease in large: small ratio of surfactant aggregates in rats.</p> <p>Description Secreted Phospholipase A2-IID Human Recombinant was produced with N-terminal His-Tag. PLA2G2D His-Tagged Fusion protein is 16.4 kDa containing 125 amino acid residues of the human secreted phospholipase A2-IID and 16 additional amino acid residues.</p>		
<b>Physical Appearance:</b>	Sterile Filtered lyophilized (freeze-dried) powder.		
<b>Gene ID:</b>	26279		
<b>Source:</b>	<i>E. coli</i>		
<b>Molecular Weight:</b>	16.4 kDa		
<b>Formulation:</b>	Sterile filtered and lyophilized from 0.5 mg/ml in 0.05 M Acetate buffer pH-4.		
<b>Purification Method:</b>	Ni-NTA affinity chromatography.		
<b>Purity:</b>	Purity of recombinant the human secreted phospholipase A2-IIA is >95%.		
<b>Specificity:</b>	The amino acid sequence of the recombinant human Secreted Phospholipase A2-IID is 100% homologous to the amino acid sequence of the human Secreted Phospholipase A2-IID without signal sequence.		

#### Amino Acid Sequence:



MRGSHHHHHH GMASHMGILN LNKMKVQVTG KMPILSYWPY GCHCGLGGRG  
QPKDATDWCC QTHDCCYDHL KTQGCYIYKY YRYNFSQGNH HCSDKGSWCE  
QQLCACDKEV AFCLKRNLDT YQKRLRFYWR PHCRGQTPGC

**Reconstitution:** Add 0.2 ml of 0.1 M Acetate buffer pH-4 and let the lyophilized pellet dissolve completely. For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 10 µg/ml. In higher concentrations the solubility of this antigen is limited.

**Applications:** Western Blotting

**Storage & 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.  
The lyophilized protein remains stable until the expiration date when stored at -20°C.

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