

## Recombinant Bee Phospholipase A2

Cat. No. Pla2-343B Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant protein produced in *E. Coli* contains phospholipase P00630 bee venom protein epitopes, 26-162 amino acids. Purified by proprietary chromatographic technique.

**Species** Honey bee

**Source** E.coli

**ProteinLength** 26-162 a.a.

**Description** Bee venom phospholipase A2 (PLA) is the main allergen in the bee sting allergy. Bee venom phospholipase A2 (BV-PLA2) is a hydrolytic enzyme which specifically cleaves the sn-2 acyl bond of phospholipids at the lipid/water interface. BV-PLA2 is a 14–16-kDa glycoprotein, consisting of 134 amino acids and displaying a single carbohydrate side chain at the residue Asn13. It is also held to be responsible for some systemic anaphylactic reactions in bee venom sensitized individuals. BV-PLA2 presents 3 peptide and a glycopeptide T cell epitopes, which are recognized by both allergic and non-allergic bee venom sensitized subjects. PLA is able to elicit both IgE mediated allergy and normal immunity to bee sting which usually is associated with high affinity IgG4 anti-PLA antibodies.

**Form** 10mM Tris-HCl, pH 6.5, 0.1M Sodium Phosphate and 8M urea.

**Purity** Protein is >95% pure as determined by 10% PAGE (coomassie staining) and RP-HPLC.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

<b>Applications</b>	Use as an antigen in ELISA and Western Blots.
<b>Stability</b>	Five years frozen. One month in solution at room temperature.
<b>Storage</b>	Protein is shipped at ambient temperature. Upon arrival, Store at -20°C.

## GENE INFORMATION

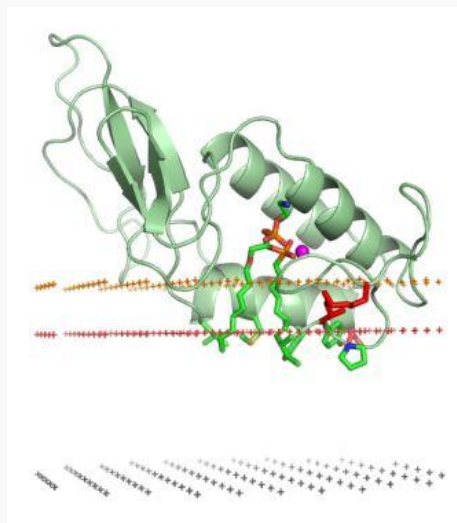
<b>Gene Name</b>	<a href="#">Pla2 phospholipase A2 [ Apis mellifera ]</a>
<b>Synonyms</b>	Pla2; phospholipase A2; GB13351; allergen Api m 1; phosphatidylcholine 2-acylhydrolase; EC 3.1.1.4
<b>Gene ID</b>	<a href="#">406141</a>
<b>mRNA Refseq</b>	<a href="#">NM_001011614</a>
<b>Protein Refseq</b>	<a href="#">NP_001011614</a>
<b>UniProt ID</b>	<a href="#">P00630</a>
<b>Chromosome Location</b>	LG13


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**Bee venom  
phospholipase A2  
sPLA2. Middle plane  
of the lipid bilayer -  
black dots. Boundary  
of the hydrocarbon  
core region - red  
dots (extracellular  
side). Layer of lipid  
phosphates - yellow  
dots.**



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