

## Product datasheet

# Recombinant human Cytosolic Phospholipase A2 protein ab198469

[2 Images](#)

### Description

<b>Product name</b>	Recombinant human Cytosolic Phospholipase A2 protein
<b>Biological activity</b>	<p>Specific Activity: 57 pmol/min/μg.</p> <p>Assay Conditions: PLA reaction was done using the 1-Hexadecanoyl-2-(1-prenedecanoyl)-sn-Glycero-3-phosphocholine substrate. Enzyme reaction is conducted in 100 μl volume containing 50 mM Tris pH 8.0, 500 mM NaCl, 10 mM CaCl<sub>2</sub>, 0.5 mg/ml BSA, 10 μM substrate and 200 ng ab198469.</p> <p>Reaction progress was monitored at ex345/em395 for 10 minutes continuously at room temperature.</p>
<b>Purity</b>	<p>&gt;= 87 % SDS-PAGE.</p> <p>Affinity purified.</p>
<b>Expression system</b>	Baculovirus infected insect cells
<b>Accession</b>	<b><u>P47712</u></b>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Sequence</b>	<pre> MSFIDPYQHIVEHQYSHKFTVVVLRATKVTKGAFGDMLDT PDPYVELFI STTPDSRKTRRHFNNDINPVWNETFEFILDPNQENVLEITL MDANYVMDE TLGTATFTVSSMKVGEKKE VPFIFNQVTEMVLEMSLEVCSCLDLRFMS ALCDQEKTFRQQRKEHIRESMKLLGPKN SEGLHSARDVPVAILGSG GGFRAMVGFSGVMKALYESGILDCATYVAGLSGSTWYM STLYSHPDFP EKGPEEINEELMKNVSHNPLLLLTPOKVKRYVESLWKKKS SGQPVTFTD IFGMLIGETLIHNRMNTLSSLKEKVNTAQCPPLPFTCLHVK PDVSELM FADWVEFSPYE IGMAKYGTFMAPDLFGSKFFMGTVVKKYEENPLHFLM GVWGSFAFSILFNRVLGVSGSQ SRGSTMEEELENITTKHIVSNDSSDSD           </pre>

DESHEPKGTENEDAGSDYQSDNQASWIHRMI  
MALVSDSALFNTREGRA  
GKVHNFMLGLNLNTSYPLSPLSDFATQDSFDDDELDAAV  
AD PDEFERI  
YEPLDVKSKKIHVVDSGLTFNLPYPLILRPQRGVDLIISFDF  
SARPSDSS PPFK  
ELLAEKWAKMNKLPFPKIDPYVFDREGLKECYVFKPKNP  
DMEK DCPTIIHFVLANINFR  
KYKAPGVPRETEEEKEIADFDIFDDPESPFST  
FNFQYPNQAFKRLHDLMHFNTLNNIDVI  
KEAMVESIEYRRQNPSRCSV  
SLSNVEARRFFNKEFLSKPKADYKDDDDKHHHHHH

<b>Predicted molecular weight</b>	87 kDa including tags
<b>Amino acids</b>	1 to 749
<b>Tags</b>	His-DDDDK tag C-Terminus
<b>Additional sequence information</b>	GenBank Accession No. NM_024420

## Specifications

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Our **Abpromise guarantee** covers the use of **ab198469** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	Functional Studies SDS-PAGE
<b>Form</b>	Liquid

## Preparation and Storage

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<b>Stability and Storage</b>	Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle. pH: 8.00 Constituents: 0.63% Tris HCl, 0.64% Sodium chloride, 0.02% Potassium chloride, 20% Glycerol (glycerin, glycerine) 80 µg/ml DDDDK peptide This product is an active protein and may elicit a biological response in vivo, handle with caution.
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## General Info

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<b>Function</b>	Selectively hydrolyzes arachidonyl phospholipids in the sn-2 position releasing arachidonic acid. Together with its lysophospholipid activity, it is implicated in the initiation of the inflammatory response.
<b>Tissue specificity</b>	Expressed in various tissues such as macrophages, platelets, neutrophils, fibroblasts and lung endothelium.
<b>Sequence similarities</b>	Contains 1 C2 domain. Contains 1 PLA2c domain.
<b>Domain</b>	The N-terminal C2 domain associates with lipid membranes upon calcium binding. It modulates

enzyme activity by presenting the active site to its substrate in response to elevations of cytosolic Ca(2+).

**Post-translational modifications**

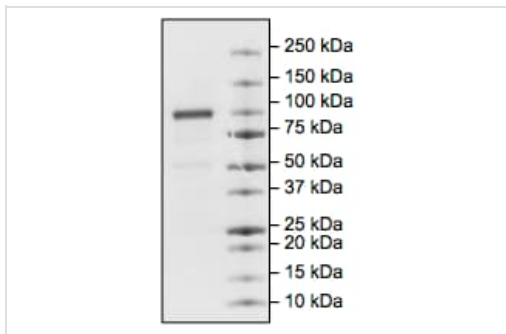
Activated by phosphorylation at both Ser-505 and Ser-727.

**Cellular localization**

Cytoplasm. Cytoplasmic vesicle. Translocates to membrane vesicles in a calcium-dependent fashion.

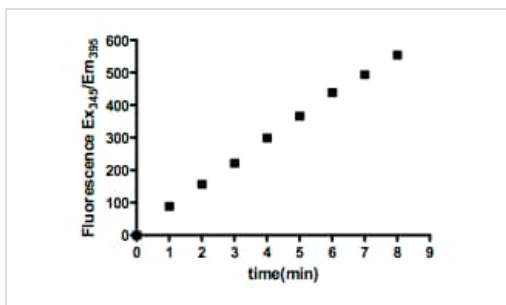
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**Images**



4-20% SDS PAGE analysis of 0.9 µg ab198469 stained with Coomassie.

SDS-PAGE - Recombinant human Cytosolic Phospholipase A2 protein (ab198469)



Specific activity analysis of ab198469.

Functional Studies - Recombinant human Cytosolic Phospholipase A2 protein (ab198469)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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