

## Product datasheet for TP320972M

## OriGene Technologies, Inc.

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## Phospholipase A2 (PLA2G4A) (NM 024420) Human Recombinant Protein

**Product data:** 

**Product Type: Recombinant Proteins** 

Recombinant protein of human phospholipase A2, group IVA (cytosolic, calcium-dependent) Description:

(PLA2G4A), 100 µg

Species: Human **Expression Host:** HEK293T

**Expression cDNA Clone** >RC220972 representing NM 024420 or AA Sequence:

Red=Cloning site Green=Tags(s)

MSFIDPYQHIIVEHQYSHKFTVVVLRATKVTKGAFGDMLDTPDPYVELFISTTPDSRKRTRHFNNDINPV WNETFEFILDPNQENVLEITLMDANYVMDETLGTATFTVSSMKVGEKKEVPFIFNQVTEMVLEMSLEVCS CPDLRFSMALCDQEKTFRQQRKEHIRESMKKLLGPKNSEGLHSARDVPVVAILGSGGGFRAMVGFSGVMK ALYESGILDCATYVAGLSGSTWYMSTLYSHPDFPEKGPEEINEELMKNVSHNPLLLLTPQKVKRYVESLW KKKSSGQPVTFTDIFGMLIGETLIHNRMNTTLSSLKEKVNTAQCPLPLFTCLHVKPDVSELMFADWVEFS PYEIGMAKYGTFMAPDLFGSKFFMGTVVKKYEENPLHFLMGVWGSAFSILFNRVLGVSGSQSRGSTMEEE LENITTKHIVSNDSSDSDDESHEPKGTENEDAGSDYQSDNQASWIHRMIMALVSDSALFNTREGRAGKVH NFMLGLNLNTSYPLSPLSDFATQDSFDDDELDAAVADPDEFERIYEPLDVKSKKIHVVDSGLTFNLPYPL ILRPQRGVDLIISFDFSARPSDSSPPFKELLLAEKWAKMNKLPFPKIDPYVFDREGLKECYVFKPKNPDM EKDCPTIIHFVLANINFRKYKAPGVPRETEEEKEIADFDIFDDPESPFSTFNFQYPNQAFKRLHDLMHFN

TLNNIDVIKEAMVESIEYRRQNPSRCSVSLSNVEARRFFNKEFLSKPKA

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

C-Myc/DDK Tag:

Predicted MW: 85 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by conventional

chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.





Store at -80°C. Storage:

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 077734

Locus ID: 5321 **UniProt ID:** P47712 RefSeq Size: 2875 Cytogenetics: 1q31.1 RefSeq ORF: 2247

Synonyms: cPLA2; cPLA2-alpha; GURDP; PLA2G4

Summary: This gene encodes a member of the cytosolic phospholipase A2 group IV family. The enzyme

> catalyzes the hydrolysis of membrane phospholipids to release arachidonic acid which is subsequently metabolized into eicosanoids. Eicosanoids, including prostaglandins and leukotrienes, are lipid-based cellular hormones that regulate hemodynamics, inflammatory

responses, and other intracellular pathways. The hydrolysis reaction also produces

lysophospholipids that are converted into platelet-activating factor. The enzyme is activated by increased intracellular Ca(2+) levels and phosphorylation, resulting in its translocation from the cytosol and nucleus to perinuclear membrane vesicles. Alternative splicing results in

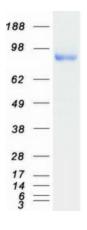
multiple transcript variants. [provided by RefSeq, Jul 2015]

**Protein Pathways:** alpha-Linolenic acid metabolism, Arachidonic acid metabolism, Ether lipid metabolism, Fc

> epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Glycerophospholipid metabolism, GnRH signaling pathway, Linoleic acid metabolism, Long-term depression, MAPK signaling pathway, Metabolic pathways, Vascular smooth muscle contraction, VEGF signaling

pathway

## **Product images:**



Coomassie blue staining of purified PLA2G4A protein (Cat# [TP320972]). The protein was produced from HEK293T cells transfected with PLA2G4A cDNA clone (Cat# [RC220972]) using MegaTran 2.0 (Cat# [TT210002]).