

## Product datasheet for RC220972L3V

## OriGene Technologies, Inc.

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## Phospholipase A2 (PLA2G4A) (NM 024420) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

Product Name: Phospholipase A2 (PLA2G4A) (NM\_024420) Human Tagged ORF Clone Lentiviral Particle

Symbol: Phospholipase A2

Synonyms: cPLA2; cPLA2-alpha; GURDP; PLA2G4

**Mammalian Cell** 

Selection:

Puromycin

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

 Tag:
 Myc-DDK

 ACCN:
 NM\_024420

 ORF Size:
 2247 bp

**ORF Nucleotide** 

OTI Disclaimer:

Sequence:

The ORF insert of this clone is exactly the same as(RC220972).

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through

naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

RefSeq: <u>NM 024420.1</u>

 RefSeq Size:
 2875 bp

 RefSeq ORF:
 2250 bp

 Locus ID:
 5321

 UniProt ID:
 P47712

 Cytogenetics:
 1q31.1

Domains: C2, PLA2 B





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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

MW: 85 kDa

**Gene 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 RefSeg, Jul 2015]