

Product datasheet for SC327372

OriGene Technologies, Inc.

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Phospholipase A2 IIA (PLA2G2A) (NM_001161727) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Phospholipase A2 IIA (PLA2G2A) (NM_001161727) Human Untagged Clone

Tag: Tag Free Symbol: PLA2G2A

Synonyms: MOM1; PLA2; PLA2B; PLA2L; PLA2S; PLAS1; sPLA2

Mammalian Cell

Selection:

None

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM_001161727, the custom clone sequence may differ by one or

more nucleotides

ATGAAGACCCTCCTACTGTTGGCAGTGATCATGATCTTTGGCCTACTGCAGGCCCATGGG
AATTTGGTGAATTTCCACAGAATGATCAAGTTGACGACAGGAAAGGAAGCCGCACTCAGT
TATGGCTTCTACGGCTGCCACTGTGGCGTGGGTGGCAGAGGATCCCCCAAGGATGCAACG
GATCGCTGCTGTGCACTCATGACTGTTGCTACAAACGTCTGGAGAAACGTGGATGTGGC
ACCAAATTTCTGAGCTACAAGTTTAGCAACTCGGGGAGCAGAATCACCTGTGCAAAACAG
GACTCCTGCAGAAGTCAACTGTGTGAGTGTATAAGGCTGCTGCCACCTGTTTTGCTAGA
AACAAGACGACCTACAATAAAAAAGTACCAGTACTATTCCAATAAACACTGCAGAGGGAGC

ACCCCTCGTTGC

Restriction Sites: Please inquire **ACCN:** NM 001161727

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).





Reconstitution Method:

- 1. Centrifuge at 5,000xg for 5min.
- 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
- 3. Close the tube and incubate for 10 minutes at room temperature.
- 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: <u>NM 001161727.1</u>, <u>NP 001155199.1</u>

 RefSeq Size:
 986 bp

 RefSeq ORF:
 435 bp

 Locus ID:
 5320

 UniProt ID:
 P14555

 Cytogenetics:
 1p36.13

Protein Families: Druggable Genome, Transmembrane

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

epsilon RI signaling pathway, Glycerophospholipid metabolism, GnRH signaling pathway, Linoleic acid metabolism, Long-term depression, MAPK signaling pathway, Metabolic

pathways, Vascular smooth muscle contraction, VEGF signaling pathway

Gene Summary: The protein encoded by this gene is a member of the phospholipase A2 family (PLA2). PLA2s

constitute a diverse family of enzymes with respect to sequence, function, localization, and divalent cation requirements. This gene product belongs to group II, which contains secreted form of PLA2, an extracellular enzyme that has a low molecular mass and requires calcium

ions for catalysis. It catalyzes the hydrolysis of the sn-2 fatty acid acyl ester bond of phosphoglycerides, releasing free fatty acids and lysophospholipids, and thought to participate in the regulation of the phospholipid metabolism in biomembranes. Several alternatively spliced transcript variants with different 5' UTRs have been found for this gene.

[provided by RefSeq, Sep 2009]

Transcript Variant: This variant (2) uses an alternate acceptor splice site at one of the 5' non-

coding exons compared to variant 1. Variants 1-4 encode the same protein.