

## Product datasheet for **RC234828**

### Calcium independent Phospholipase A2 (PLA2G6) (NM\_001199562) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Calcium independent Phospholipase A2 (PLA2G6) (NM_001199562) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Calcium independent Phospholipase A2
Synonyms:	Cal-PLA2; GVI; INAD1; iPLA2; IPLA2-VIA; iPLA2beta; NBIA2; NBIA2A; NBIA2B; PARK14; PLA2; PNPLA9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC234828 representing NM\_001199562  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCAGTTCTTTGGCCGCTGGTCAATACCTTCAGTGGCGTCACCAACTTGTCTCTAACCCATTCCGGG  
 TGAAGGAGGTGGCTGTAGCCGACTACACCTCGAGTGACCGAGTTCGGGAGGAAGGGCAGCTGATTCTGTT  
 CCAGAACACTCCCAACCGCACCTGGGACTGCGTCTGGTCAACCCAGGAACTCACAGAGTGGATCCGA  
 CTCTCCAGCTGGAGTTGGAGGCTGACGCCCTAGTGAATTTCCATCAGTATTCTTCCAGCTGCTACCCCT  
 TCTATGAGAGCTCCCCTCAGGTCTGCACACTGAGGTCTGCAGCACCTGACCGACCTCATCCGTAACCA  
 CCCAGCTGGTCACTGGCCACCTGGCTGTGGAGCTAGGGATCCGCGAGTGTTCATCACAGCCGTATC  
 ATCAGCTGTGCCAATTGCGCGGAGAACGAGGAGGGCTGCACACCCTGCACCTGGCTGCCGAAGGGTG  
 ATGGGGAGATCCTGGTGGAGCTGGTGCAGTACTGCCACACTCAGATGGATGTACCGACTACAAGGGAGA  
 GACCGTCTCCATTATGTGTCCAGGGTGACAATTCTCAGGTGCTGCAGCTCCTTGAAGGAACGCAGTG  
 GCTGGCCTGAACCAAGTGAATAACCAAGGGCTGACCCCGCTGCACCTGGCTGCCAGCTGGGGAAGCAGG  
 AGATGGTCCGCGTGTGTGCTGTGCAATGCTCGGTGCAACATCATGGGCCCAACCGCTACCCCATCCA  
 CTCGGCCATGAAGTTCTCTCAGAAGGGGTGTGCGGAGATGATCATCAGCATGGACAGCAGCCAGATCCAC  
 AGCAAAGACCCCGTTACGGAGCCAGCCCTCCACTGGGCAAGAAGCGCAGAGATGGCCCGCATGCTGC  
 TGAAACGGGGCTGCAACGTGAACAGCACCAGCTCCGCGGGGAACACGGCCCTGCACGTGGCGGTGATGCC  
 CAACCGTTCGACTGTCCATAGTGTGCTGACCCACGGGGCAACCGCGGATGCCCGGGAGAGCACGGC  
 AACACCCCGCTGCACCTGGCCATGTGAAAGACAACGTGGAGATGATCAAGGCCCTCATCGTGTTCGGAG  
 CAGAAGTGGACACCCCGAATGACTTTGGGGAGACTCCTACATTCCTAGCCTCCTAAATCGGCAGACAACT  
 ACAGGATCTCATGCATCTCACGGGCCGGGAAGCCAGCGTTTCCTGGGCTCCATGAGGGACGAGAAG  
 CGGACCCACGACCACCTGCTGTGCTGGATGGAGGAGGAGTGAAGGCCTCATCATCAGCTCCTCA  
 TCGCCATCGAGAAGGCCTCGGGTGTGGCCACCAAGGACCTGTTTGACTGGGTGGCGGGCACCAGCACTGG  
 AGGCATCCTGGCCCTGGCATTCTGCACAGTAAGTCCATGGCCTACATGCGCGGCATGTACTTTCGCATG  
 AAGGATGAGGTGTTCCGGGGCTCCAGGCCCTACGAGTCCGGGGCCCTGGAGGAGTTCCTGAAGCGGGAGT  
 TTGGGGAGCACACCAAGATGACGGACGTCAGGAAACCAAGGTGATGCTGACAGGGACACTGTCTGACCG  
 GCAGCCGGCTGAACTCCACCTCTCCGGAACACGATGCTCCAGAACTGTCCGGGAGCCTCGTTTCAAC  
 CAGAACGTTAACCTCAGGCCTCCAGCTCAGCCCTCAGACCAGCTGGTGTGGCGGGCGGCCGAAGCAGCG  
 GGGCAGCTCCTACTTACTTCCGACCCAATGGGCGCTTCTTGACGGTGGGCTGCTGGCCAACAACCCAC  
 GCTGGATGCCATGACCGAGATCCATGAGTACAATCAGGACCTGATCCGCAAGGGTCAGGCCAACAAGGTG  
 AAGAACTCTCCATCGTTGTCTCCCTGGGGACAGGGAGGTCCCCACAAGTGCCTGTGACCTGTGTGGATG  
 TCTTCCGTCAGCAACCCCTGGGAGCTGGCCAAGACTGTTTTGGGGCAAGGAACTGGGCAAGATGGT  
 GGTGGACTGTTGCACGGATCCAGACGGGCGGGCTGTGGACCGGGCACGGGCTGGTGCAGATGGTCGGC  
 ATCCAGTACTTCAGATTGAACCCCAAGCTGGGGACGGACATCATGCTGGATGAGGTGAGTGACACAGTGC  
 TGGTCAACGCCCTCTGGGAGACCGAGGTCTACATCTATGACACCGCGAGGAGTTCAGAAGCTCATCCA  
 GCTGCTGCTCTCACC

**ACGCGT**ACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTAA

**Protein Sequence:** >RC234828 representing NM\_001199562  
 Red=Cloning site Green=Tags(s)

MQFFGRLVNTFSGVTNLFNPFVRVKEVAVADYTSSDRVREEGQLILFQNTPNRTWDCVLVNPNSQSGFR  
 LFQLELEADALVNFHQYSSQLLPFYESSPQVLHTEVLQHLTDLIRNHPSWSVAHLAVELGIRECFHHSRI  
 ISCANCAENEEGCTPLHLACRKGDEILVELVQYCHTQMDVTDYKGETVFHYAVQGDNSQVLQLLGRNAV  
 AGLNQVNNQGLTPLHLACQLGKQEMVRVLLL CNARCNIMGPNGYPIHSAMKFSQKGAEMIISMDSQIH  
 SKDPRYGASPLHWAKNAEMARMLLKRGCVNSTSSAGNTALHVAVMRNRFDCAIVLLTHGANADARGEHG  
 NTPLHLAMSKDNVEMIKALIVFGAEVDTPNDFGETPTFLASKIGRQLQDLMHISRARKPAFILGSMRDEK  
 RTHDHLCLDGGGVKGLIIQQLIAIEKASGVATKDLFDWVAGTSTGGILALAILHSKSMAYMRGMYFRM  
 KDEVFRGSRPYESGPLEEFLKREFGEHTKMTDVRKPKVMLTGTLSDRQPAELHLFRNYDAPETVREPRFN  
 QNVNLRPPAQPSDQLVWRAARSSGAAPTYFRPNGRFLDGGLLANNPTLDAMTEIHEYNQDLIRKQQANKV  
 KKLIVVSLGTGRSPQVPVTCVDVFRPSNPWELAKTVFGAKELGKMVDCCTDPDGRAVDRARAWCEMVG  
 IQYFRLNPQLGTDIMLDEVSDTVLVNALWETEVIYEHREEFQKLIQLLLSP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6155\\_h04.zip](https://cdn.origene.com/chromatograms/mk6155_h04.zip)

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

ACCN: NM\_001199562

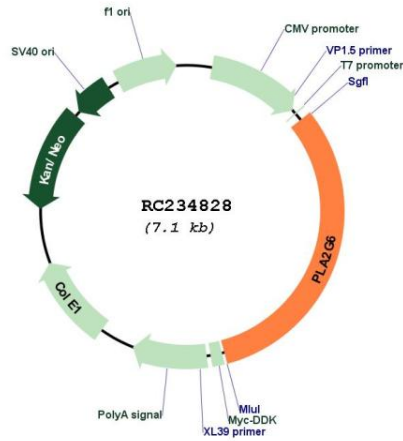
ORF Size: 2256 bp

<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_001199562.3</a>
<b>RefSeq Size:</b>	3032 bp
<b>RefSeq ORF:</b>	2259 bp
<b>Locus ID:</b>	8398
<b>UniProt ID:</b>	<a href="#">O60733</a>
<b>Cytogenetics:</b>	22q13.1
<b>Protein Pathways:</b>	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
<b>MW:</b>	84.1 kDa

**Gene Summary:**

The protein encoded by this gene is an A2 phospholipase, a class of enzyme that catalyzes the release of fatty acids from phospholipids. The encoded protein may play a role in phospholipid remodelling, arachidonic acid release, leukotriene and prostaglandin synthesis, fas-mediated apoptosis, and transmembrane ion flux in glucose-stimulated B-cells. Several transcript variants encoding multiple isoforms have been described, but the full-length nature of only three of them have been determined to date. [provided by RefSeq, Dec 2010]

**Product images:**



Circular map for RC234828