

Product datasheet for **RG234828**

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:	TurboGFP
Symbol:	PLA2G6
Synonyms:	Cal-PLA2; GVI; INAD1; iPLA2; IPLA2-VIA; iPLA2beta; NBIA2; NBIA2A; NBIA2B; PARK14; PLA2; PNPLA9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG234828 representing NM_001199562
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCAGTTCTTTGGCCGCTGGTCAATACCTTCAGTGGCGTCACCAACTTGTCTCTAACCCATTCCGGG
 TGAAGGAGGTGGCTGTGGCCGACTACACCTCGAGTGACCGAGTTCGGGAGGAAGGCAGCTGATTCTGTT
 CCAGAACACTCCCAACCGCACCTGGGACTGCGTCTGGTCAACCCAGGAACTCACAGAGTGGATCCGA
 CTCTCCAGCTGGAGTTGGAGGCTGACGCCCTAGTGAATTTCCATCAGTATTCTCCAGCTGCTACCCCT
 TCTATGAGAGCTCCCCTCAGGTCTGCACACTGAGGTCTGCAGCACCTGACCGACCTCATCCGTAACCA
 CCCAGCTGGTCACTGGCCACCTGGCTGTGGAGCTAGGGATCCGCGAGTGTTCATCACAGCCGTATC
 ATCAGCTGTGCCAATTGCGCGGAGAACGAGGAGGGCTGCACACCCTGCACCTGGCTGCCGAAGGGTG
 ATGGGGAGATCCTGGTGGAGCTGGTGCAGTACTGCCACACTCAGATGGATGTACCGACTACAAGGGAGA
 GACCGTCTCCATTATGTGTCCAGGGTACAATTCTCAGGTGCTGCAGCTCCTTGAAGGAACGCAGTG
 GCTGGCCTGAACCAAGTGAATAACCAAGGGCTGACCCCGCTGCACCTGGCTGCCAGCTGGGGAAGCAGG
 AGATGGTCCGCGTGTGTGTGCAATGCTCGGTGCAACATCATGGGCCCAACCGCTACCCCATCCA
 CTCGGCCATGAAGTTCTCTCAGAAGGGGTGTGCGGAGATGATCATCAGCATGGACAGCAGCCAGATCCAC
 AGCAAAGACCCCGTTACGGAGCCAGCCCTCCACTGGGCCAAGAACGCAGAGATGGCCCGCATGCTGC
 TGAAACGGGGCTGCAACGTGAACAGCACCAGCTCCGCGGGGAACACGGCCCTGCACGTGGCGGTGATGCG
 CAACCGTTCGACTGTGCCATAGTGTGCTGACCCACGGGGCAACCGCGGATGCCCGGGAGAGCACGGC
 AACACCCCGCTGCACCTGGCCATGTGAAAGACAACGTGGAGATGATCAAGGCCCTCATCGTGTTCGGAG
 CAGAAGTGGACACCCCGAATGACTTTGGGGAGACTCCTACATTCCTAGCCTCCAAAATCGGCAGACAACT
 ACAGGATCTCATGCATCTCACGGGCCGGGAAGCCAGCGTTCATCCTGGGCTCCATGAGGGACGAGAAG
 CGGACCCACGACCACCTGCTGTGCTGGATGGAGGAGGAGTAAAAGCCTCATCATCAGCTCCTCA
 TCGCCATCGAGAAGCCTCGGGTGTGGCCACCAAGGACCTGTTTGACTGGGTGGCGGGCACCAGCACTGG
 AGGCATCCTGGCCCTGGCATTCTGCACAGTAAGTCCATGGCCTACATGCGCGGCATGACTTTTCGATG
 AAGGATGAGGTGTTCCGGGGCTCCAGGCCCTACGAGTCCGGGGCCCTGGAGGAGTTCCTGAAGCGGGAGT
 TTGGGGAGCACACCAAGATGACGGACGTCAGGAAACCAAGGTGATGCTGACAGGGACACTGTCTGACCG
 GCAGCCGGCTGAACTCCACCTCTCCGGAACACGATGCTCCAGAACTGTCCGGGAGCCTCGTTTCAAC
 CAGAACGTTAACCTCAGGCCTCCAGCTCAGCCCTCAGACCAGCTGGTGTGGCGGGCGGCCGAAGCAGCG
 GGGCAGCTCCTACTTACTTCCGACCCAATGGGCGCTTCTTGACGGTGGGCTGCTGGCCAACAACCCAC
 GCTGGATGCCATGACCGAGATCCATGAGTACAATCAGGACCTGATCCGCAAGGGTCAGGCCAACAAGGTG
 AAGAACTCTCCATCGTTGTCTCCCTGGGGACAGGGAGGTCCCCACAAGTGCCTGTGACCTGTGTGGATG
 TCTTCCGTCCCAGCAACCCCTGGGAGCTGGCCAAGACTGTTTTTGGGGCAAGGAACTGGGCAAGATGGT
 GGTGGACTGTTGCACGGATCCAGACGGGCGGGCTGTGGACCGGGCACGGGCTGGTGCAGATGGTCGGC
 ATCCAGTACTTCAGATTGAACCCCAAGCTGGGGACGGACATCATGCTGGATGAGGTGAGTGACACAGTGC
 TGGTCAACGCCCTCTGGGAGACCGAGGTCTACATCTATGACACCGCGAGGAGTTCAGAAGCTCATCCA
 GCTGCTGCTCTACCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG234828 representing NM_001199562
 Red=Cloning site Green=Tags(s)

MQFFGRLVNTFSGVTNLFNPFVRVKEVAVADYTSDDRVREEGQLILFQNTPNRTWDCVLVNPNSQS¹GFR
 LFQLELEADALVNFHQYSSQLLPFYESSPQVLHTEVLQHLTDLIRNHPSWSVAHLAVELGIRECFHHSRI
 ISCANCAENEEGCTPLHLACRKGDGEILVELVQYCHTQMDVTDYKGETVFHYAVQGDNSQVLLQLLGRNAV
 AGLNQVNNQGLTPLHLACQLGKQEMVRVLLL CNARCNI MGPNGYPIHSAMKF S QKGAEMI I SMDSSQIH
 SKDPRYGASPLHWAKNAEMARMLLKRGCVNSTSSAGNTALHVAVMRNRFDCAIVLLTHGANADARGEHG
 NTPHLAMS KDNVEMIKALIVFGAEVDT PND FGETPTFLASKIGRQLQDLMHISRARKPAFILGSMRDEK
 RTHDHLLCLDGGGVKGLIIIIQLLIAIEKASGVATKDLFDWVAGTSTGGILALAILHSKSMAYMRGMYFRM
 KDEVFRGSRPYESGPLEEFLKREFGEHTKMTDVRKPKVMLTGTLSDRQPAELHLFRNYDAPETVREPRFN
 QNVNLRPPAQPSDQLVWRAARSSGAAPTYFRPNGRFLDGGLLANNPTLDAMTEIHEYNQDLIRKQANKV
 KKL SIVVSLGTGRSPQVPVTCVDVFRPSNPWELAKTVFGAKELGKMVVCCTDPDGRAVDRARAWCEMVG
 IQYFRLNPQLGTDIMLDEVSDTVLVNALWETEVIYEHREEFQKLIQLLLSP

TRTRPLE - GFP Tag - V

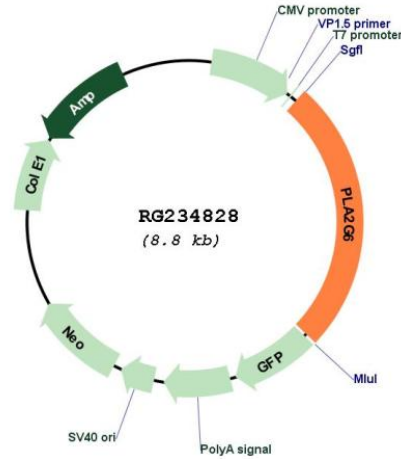
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001199562

ORF Size: 2256 bp

OTI Disclaimer: 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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

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:	NM_001199562.3
RefSeq Size:	3032 bp
RefSeq ORF:	2259 bp
Locus ID:	8398
UniProt ID:	O60733
Cytogenetics:	22q13.1
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
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]