

## Product datasheet for **RG207546**

### Calcium independent Phospholipase A2 (PLA2G6) (NM\_003560) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Calcium independent Phospholipase A2 (PLA2G6) (NM_003560) Human Tagged ORF Clone
Tag:	TurboGFP
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-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG207546 representing NM\_003560  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCAGTTCTTTGGCCGCTGGTCAATACCTTCAGTGGCGTCACCAACTTGTCTCTAACCCATTCCGGG  
 TGAAGGAGGTGGCTGTGGCCGACTACACCTCGAGTGACCGAGTTCGGGAGGAAGGGCAGCTGATTCTGTT  
 CCAGAACACTCCCAACCGCACCTGGGACTGCGTCTGGTCAACCCAGGAACTCACAGAGTGGATCCGA  
 CTCTCCAGCTGGAGTTGGAGGCTGACGCCCTAGTGAATTTCCATCAGTATTCTTCCAGCTGCTACCCCT  
 TCTATGAGAGCTCCCCTCAGGTCTGCACACTGAGGTCTGCAGCACCTGACCGACCTCATCCGTAACCA  
 CCCAGCTGGTCACTGGCCACCTGGCTGTGGAGCTAGGGATCCGCGAGTGCTTCCATCACAGCCGTATC  
 ATCAGCTGTGCCAATTGCGCGGAGAACGAGGAGGGCTGCACACCCTGCACCTGGCTGCCGAAGGGTG  
 ATGGGGAGATCCTGGTGGAGCTGGTGCAGTACTGCCACACTCAGATGGATGTCACCGACTACAAGGGAGA  
 GACCGTCTCCATTATGTGTCCAGGGTGACAATTCTCAGGTGCTGCAGCTCCTTGAAGGAACGCAGTG  
 GCTGGCCTGAACCAAGTGAATAACCAAGGGCTGACCCCGCTGCACCTGGCTGCCAGCTGGGGAAGCAGG  
 AGATGGTCCGCGTGTGTGTGCAATGCTCGGTGCAACATCATGGGCCCAACCGCTACCCCATCCA  
 CTCGGCCATGAAGTTCTCTCAGAAGGGGTGTGCGGAGATGATCATCAGCATGGACAGCAGCCAGATCCAC  
 AGCAAAGACCCCGTTACGGAGCCAGCCCTCCACTGGGCCAAGAACGCAGAGATGGCCCGCATGCTGC  
 TGAAACGGGGCTGCAACGTGAACAGCACCAGCTCCGCGGGGAACACGGCCCTGCACGTGGCGGTGATGCC  
 CAACCGCTTCCAGTGTCCATAGTGTGCTGACCCACGGGGCAACCGCGGATGCCCGGGAGAGCACGGC  
 AACACCCCGCTGCACCTGGCCATGTGAAAGACAACGTGGAGATGATCAAGGCCCTCATCGTGTTCGGAG  
 CAGAATGGACACCCCGAATGACTTTGGGGAGACTCCTACATTCCTAGCCTCAAAAATCGGCAGACTTGT  
 CACCAGGAAGGCGATCTTGACTCTGCTGAGAACCCTGGGGCCGAATACTGCTTCCACCCATCCACGGG  
 GTCCCGCGGAGCAGGGCTCTGCAGCGCCACATCATCCCTTCTCCCTGGAAGAGCTCAGCCCCACCGA  
 TCAGCCTAAACAACCTAGAACTACAGGATCTCATGCACATCTCACGGGCCGGAAGCCAGCGTTCATCCT  
 GGGCTCCATGAGGGACGAGAAGCGGACCCACGACCACCTGCTGTGCCTGGATGGAGGAGGAGTGAAGGC  
 CTCATCATCATCCAGCTCCTCATCGCCATCGAGAAGGCCCTCGGGTGTGGCCACCAAGGACCTGTTTGACT  
 GGGTGGCGGGCACCAGCACTGGAGGCATCCTGGCCCTGGCCATTCTGCACAGTAAGTCCATGGCCTACAT  
 GCGCGGCATGTACTTTTCGATGAAGGATGAGGTGTTCCGGGGCTCCAGGCCCTACGAGTCGGGGCCCTG  
 GAGGAGTTCCTGAAGCGGAGTTTGGGGAGCACACCAAGATGACGGACGTGAGGAAACCAAGGTGATGC  
 TGACAGGGACACTGTCTGACCGGACGGCTGAACTCCACCTCTCCGGAACACGATGCTCCAGAAAC  
 TGTCCGGGAGCCTCGTTTCAACCAGAACGTTAACCTCAGGCCTCCAGCTCAGCCCTCAGACCAGCTGGTG  
 TGGCGGGCGGCCGAAGCAGCGGGCAGCTCCTACTTACTTCCGACCCAATGGGCGCTTCTCTGGACGGTG  
 GGCTGTGGCCAAACAACCCACGCTGGATGCCATGACCGAGATCCATGAGTACAATCAGGACCTGATCCG  
 CAAGGGTCAGGCCAACAAGGTGAAGAACTCTCCATCGTTGTCTCCCTGGGGACAGGGAGGTCCCAACA  
 GTGCCTGTGACCTGTGTGGATGTCTTCCGTCCCAGCAACCCTGGGAGCTGGCCAAGACTGTTTTGGGG  
 CCAAGGAACTGGCAAGATGGTGGTGGACTGTTGCACGGATCCAGACGGGGGGCTGTGGACCGGGCAGC  
 GGCCTGGTGCAGATGGTCGGCATCCAGTACTTCAGATTGAACCCCAAGCTGGGGACGGACATCATGCTG  
 GATGAGGTGAGTACACAGTGTGGTCAACGCCCTCTGGGAGACCGAGGTCTACATCTATGAGCACCGCG  
 AGGAGTCCAGAAGCTCATCCAGCTGCTGCTCACCC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG207546 representing NM\_003560  
 Red=Cloning site Green=Tags(s)

MQFFGRLVNTFSGVTNLFSPFRVKEVAVADYTSDDRVREEGQLILFQNTPNRTWDCVLVNPNSQSGFR  
 LFQLELEADALVNFHQYSSQLLPFYESSPQVLHTEVLQHLTDLIRNHPSWSVAHLAVELGIRECFHHSRI  
 ISCANCAENEEGCTPLHLACRKGDEILVELVQYCHTQMDVTDYKGETVFHYAVQGDNSQVLQLLGRNAV  
 AGLNQVNNQGLTPLHLACQLGKQEMVRVLLL CNARC NIMGPNGYPIHSAMKFSQKGAEMIISMDSQIH  
 SKDPRYGASPLHWAKNAEMARMLLKRGCVNSTSSAGNTALHVAVMRNRFDCAIVLLTHGANADARGEHG  
 NTPLHLAMSKDNVEMIKALIVFGAEVDTPNDFGETPTFLASKIGRLVTRKAILTLLRRTVGAEYCFPPIHG  
 VPAEQGSAAHPHPFLERAQPPPI SLNNLELQDLMHISRARKPAFILGSMRDEKRTHDHLCLDGGGVKG  
 LIIIQLLIAIEKASGVATKDLFDWVAGTSTGGILALAILHSKSMAYMRGMYFRMKDEVFRGSRPYESGPL  
 EEFLKREFGEHTKMTDVRKPKVMLTGTLSDRQPAELHLFRNYDAPETVREPRFNQNVNLRPPAQPSDQLV  
 WRAARSSGAAPTYFRPNGRFLDGGLLANNPTLDAMTEIHEYNQDLIRKQANKVKKLSIVVSLGTGRSPQ  
 VPVTCVDVFRPSNPWELAKTVFGAKELGKMVVDCCDTPDGRAVDRARAWCEMVGIIQYFRLNPQLGTDIML  
 DEVSDTVLVNALWETEVIYEHREEFQKLIQLLLS

TRTRPLE - GFP Tag - V

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**



**ACCN:** NM\_003560

**ORF Size:** 2418 bp

**OTI Disclaimer:** 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\\_003560.4](#)

**RefSeq Size:** 3239 bp

**RefSeq ORF:** 2421 bp

**Locus ID:** 8398

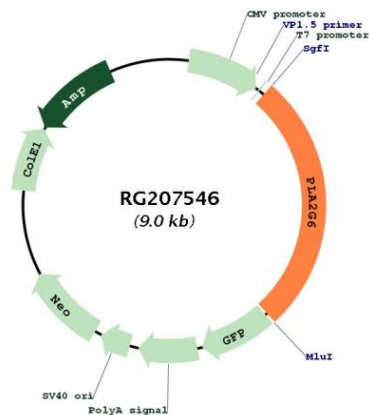
**UniProt ID:** [O60733](#)

**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]

**Product images:**



Circular map for RG207546