

Product datasheet for **RG207789**

PLA2G5 (NM_000929) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PLA2G5 (NM_000929) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: PLA2G5
Synonyms: FRFB; GV-PLA2; hVPLA(2); PLA2-10
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG207789 representing NM_000929
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAAGGCTCCTCCACTGGCTTGGTTCCTGGCTTGTAGTGTGCCTGCTGTGCAAGGAGGCTTGTCTGG
ACCTAAAATCAATGATCGAGAAGGTGACAGGGAAGAACGCCCTGACAACTACGGCTTCTACGGCTGTTA
CTGCGGCTGGGGCGCCGAGGAACCCCAAGGATGGCACCGATTGGTGTGTTGGGCGCATGACCACTGC
TATGGGCGGCTGGAGGAGAAGGGCTGCAACATTCGCACACAGTCTACAAATACAGATTCGCGTGGGGCG
TGGTACCTGCGAGCCCGGCCCTTCTGCCATGTGAACCTCTGTGCCTGTGACCGAAGCTCGTCTACTG
CCTCAAGAGAACTACGGAGCTACAACCCACAGTACCAATACTTCCCAACATCTCTGTCTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG207789 representing NM_000929
Red=Cloning site Green=Tags(s)

MKGLLPLAWFLACSVPAVQGLLDLKSMIEKVTGKNALTNYGFYGCYCGWGRGTPKDGTDWCCWAHDHC
YGRLEEKGCNIRTQSYKYRFAWGVVTCPEPFPFCHVNLACDRKLVYCLKRNLRSYNPQYQYFPNILCS

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



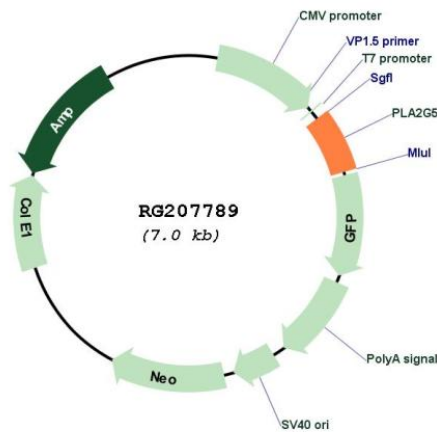
[View online »](#)

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_000929
 ORF Size: 414 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:	<ol style="list-style-type: none"> 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_000929.3
RefSeq Size:	1911 bp
RefSeq ORF:	417 bp
Locus ID:	5322
UniProt ID:	P39877
Cytogenetics:	1p36.13
Domains:	PA2c
Protein Families:	Druggable Genome, Secreted Protein
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:

This gene is a member of the secretory phospholipase A2 family. It is located in a tightly-linked cluster of secretory phospholipase A2 genes on chromosome 1. The encoded enzyme catalyzes the hydrolysis of membrane phospholipids to generate lysophospholipids and free fatty acids including arachidonic acid. It preferentially hydrolyzes linoleoyl-containing phosphatidylcholine substrates. Secretion of this enzyme is thought to induce inflammatory responses in neighboring cells. Alternatively spliced transcript variants have been found, but their full-length nature has not been determined. [provided by RefSeq, Jul 2008]