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Product datasheet for RG216089

PLA2G1B (NM_000928) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PLA2G1B (NM_000928) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PLA2G1B
Synonyms:	PLA2; PLA2A; PPLA2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG216089 representing NM_000928
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAACTCCTTGTGCTAGCTGTGCTGCTCACAGTGGCCGCCGCCGACAGCGGCATCAGCCCTCGGGCCG
TGTGGCAGTTCCGCAAAATGATCAAGTGCGTGATCCCGGGGAGTGACCCCTTCTTGGAATACAACAACTA
CGGCTGCTACTGTGGCTTGGGGGGCTCAGGCACCCCCGTGGATGAACTGGACAAGTGCTGCCAGACACAT
GACAACTGCTATGACCAGGCCAAGAAGCTGGACAGCTGTAAATTTCTGCTGGACAACCCGTACACCCACA
CCTATTCATACTCGTGCTCTGGCTCGGCAATCACCTGTAGCAGCAAAAACAAAGAGTGTGAGGCCTTCAT
TTGCAACTGCGACCGCAACGCTGCCATCTGCTTTTCAAAAGCTCCATATAACAAGGCACACAAGAACCTG
GACACCAAGAAGTATTGTCAGAGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG216089 representing NM_000928
Red=Cloning site Green=Tags(s)

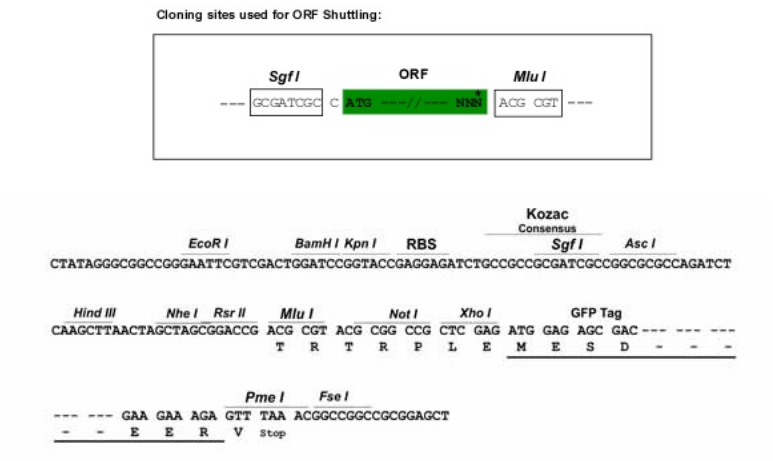
MKLLVLAVLLTVAAADSGISPRAVWQFRKMIKCVIPGSDPFLEYNNYGCYCGLGGSGTPVDELDKCCQTH
DNCYDQAKKLDSCKFLLDNPYTHTYSYSCSGSAITCSSKNKECEAFICNCDRNAAICFSKAPYNKAHKNL
DTKKYCQS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

View online »

Cloning Scheme:



ACCN:	NM_000928
ORF Size:	444 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_000928.3
RefSeq Size:	585 bp
RefSeq ORF:	447 bp
Locus ID:	5319
UniProt ID:	P04054

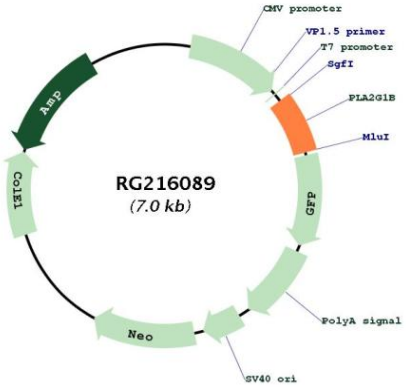
Cytogenetics: 12q24.31

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 encodes a secreted member of the phospholipase A2 (PLA2) class of enzymes, which is produced by the pancreatic acinar cells. The encoded calcium-dependent enzyme catalyzes the hydrolysis of the sn-2 position of membrane glycerophospholipids to release arachidonic acid (AA) and lysophospholipids. AA is subsequently converted by downstream metabolic enzymes to several bioactive lipophilic compounds (eicosanoids), including prostaglandins (PGs) and leukotrienes (LTs). The enzyme may be involved in several physiological processes including cell contraction, cell proliferation and pathological response. [provided by RefSeq, Aug 2013]

Product images:



Circular map for RG216089