

# Product datasheet for RC216089

### PLA2G1B (NM\_000928) Human Tagged ORF Clone

### **Product data:**

#### OriGene Technologies, Inc.

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Product Type:	Expression Plasmids
Product Name:	PLA2G1B (NM_000928) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PLA2G1B
Synonyms:	PLA2; PLA2A; PPLA2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	<pre>&gt;RC216089 representing NM_000928 Red=Cloning site Blue=ORF Green=Tags(s)</pre>
	TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCC <mark>GCGATCGC</mark> C
	ATGAAACTCCTTGTGCTAGCTGTGCTGCTCACAGTGGCCGCCGCCGACAGCGGCATCAGCCCTCGGGCCG TGTGGCAGTTCCGCAAAATGATCAAGTGCGTGATCCCGGGGAGTGACCCCTTCTTGGAATACAACAACTA CGGCTGCTACTGTGGCTTGGGGGGGCTCAGGCACCCCCGTGGATGAACTGGACAAGTGCTGCCAGACACAT GACAACTGCTATGACCAGGCCAAGAAGCTGGACAGCTGTAAATTTCTGCTGGACAACCCGTACACCCACA CCTATTCATACTCGTGCTCTGGCTCGGCAATCACCTGTAGCAGCAAAAACAAAGAGTGTGAGGCCTTCAT TTGCAACTGCGACCGCAACGCTGCCATCTGCTTTTCAAAAGCTCCATATAACAAGGCACACAAGAACCTG GACACCAAGAAGTATTGTCAGAGT
	ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAG <b>GTTTAA</b>
Protein Sequence:	>RC216089 representing NM_000928 <mark>Red</mark> =Cloning site Green=Tags(s)
	MKLLVLAVLLTVAAADSGISPRAVWQFRKMIKCVIPGSDPFLEYNNYGCYCGLGGSGTPVDELDKCCQTH DNCYDQAKKLDSCKFLLDNPYTHTYSYSCSGSAITCSSKNKECEAFICNCDRNAAICFSKAPYNKAHKNL DTKKYCQS
	TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Chromatograms:	https://cdn.origene.com/chromatograms/mk6117_b04.zip



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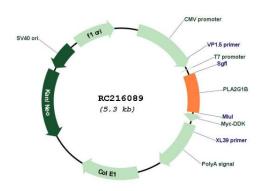
## **PLA2G1B (NM\_000928) Human Tagged ORF Clone – RC216089**

<ul> <li>reference only. However, individual transcript sequences of the same gene can differ thronaturally 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 prevail variants is recommended prior to use. More info</li> <li>OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expressio varies depending on the nature of the gene.</li> <li>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 wate and add 100 ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the lice at the bottom.</li> </ul>	Restriction Sites:	Sgfl-Mlul
Endition       Endition <th< th=""><th>Cloning Scheme:</th><th>Sgfi ORF Miu I</th></th<>	Cloning Scheme:	Sgfi ORF Miu I
Image of the product		EcoR I Bam H I Kpn I RBS Sgf I
are one one are are between out the back of the are one out are of the back of the		MUCI TO A CONTRACT OF ACTION AND A CONTRACT AND A C
ACCN:NM_000928DRF Size:444 bpDTI 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 thro 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 prevail variants is recommended prior to use. More infoDTI 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 wate 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 lid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date shipping when stored at -20°C.RefSeq Size:585 bpRefSeq ORF:447 bp		GAT CTG GCA GCA AAT GAT ATC CTG GAT TAC AAG GAT GAC GAC GAT AAG GTT TAA ACGGCCGGCC
DRF Size:444 bpDTI 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 thro 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 prevail variants is recommended prior to use. More infoDTI Annotation:This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.DTI Annotation: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 wate containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of wate 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 life at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date shipping when stored at -20°C.RefSeqNM 000928.3RefSeq Size:585 bpRefSeq ORF:447 bp		* The last codon before the Stop codon of the ORF
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RefSeq ORF: 447 bp	RefSeq:	<u>NM 000928.3</u>
	efSeq Size:	585 bp
ocus ID: 5319	efSeq ORF:	447 bp
	ocus ID:	5319

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Service PLA2G1B (NM_000928) Human Tagged ORF Clone – RC216089		
UniProt ID:	<u>P04054</u>	
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	
MW:	16.2 kDa	
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]	

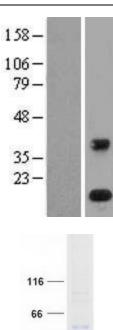
## Product images:



Circular map for RC216089

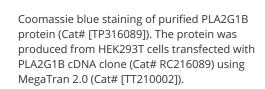
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35 --25 --18 --14 -- Western blot validation of overexpression lysate (Cat# [LY400342]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216089 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



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