

Product datasheet for **RC220690**

PLA2G4E (NM_001080490) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PLA2G4E (NM_001080490) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PLA2G4E
Synonyms:	FLJ45651; MGC126633; MGC126661
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC220690 representing NM_001080490
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCGCGCCAAGTGCATTACAGAACCAGTAGGTATAGAGCTGGCACCCCTGCCTGCAGGCTCCAGCGTAC
 CGGAGACAGACCTGAAGGGTGTGGTCCAGGCCCGGGTGGGGGGCCAGTGTTCGGAAAAGCCAAGGGA
 AGGGTTCAAGAGGGCTGAGCAGGTTCTGTGAGCCAGACAGACTGTTTTGTGAGCCTCTGGCTGCCACC
 GCCTCTCAGAAGAAGCTGAGGACAAGGACCATCTCCAACCTGCCAAATCCAGAGTGAATGAAAGCTTCA
 ACTTCCAGATCCAGAGCCGAGTGAAGAACGTGCTAGAGTTGAGTGTCTGTGATGAAGACACAGTGACACC
 AGATGACCATCTCCTGACAGTTCTATGACCTCACCAAGCTCTGTTCCGAAAAGAAAACCCACGTGAAG
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 GGGGTGGAACAAGATCCATGACCTCCATGTATGGCCACCTGCTGGGCTGCAGAAGCTGAACCTCCTGG
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 GTCAGATCAGCGTCTGCTTTGAGCTGCGGCCAGAACCCCTGCCATCTACCTCACCATCAATGTCAAG
 GATGATGAAGCAACCAGGACTTCAGAGAGTGGTTCGAGTTCTCCCTACGAGGTGGGCTGCAGAAGT
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC220690 representing NM_001080490
Red=Cloning site Green=Tags(s)

MRAKCITEPVGIELAPCLQAPSVPETDLKGVVQARGGGASVLEKPREGFKRAEQVPVSQTDCFVSLWLP
ASQKKLRTRTISNCPNPEWNEFNFQISRVKNVLELSVCDEDTVTPDDHLLTVLYDLTKLCFRKKT
FPLNPQGMEELEVEFLLEESPPPETLVNGLVSRQVSCLEVHAQSRRRRKREKMKDLLVMNESFENT
QVRPCLPECCPTSACFQTAACFHYPKYFQSQVHVEVPKSHWSCGLCCRSRKKGPI SQPLDCLSDGQVMT
LPVGESYELHMKSTPCPETLDVRLGFSLCPAELEFLQKRKVVVAKALKQVLQLEEDLQEDEVPLI
AIMATGGGTRSMYSYGHLLGLQKLNLLDCASYITGLSGATWTMATLYRDPDWSSKNLEPAIFEARRH
VVKDKLP SLFPDQLRKFQEELRQRSQEGYRVTFDFWGLLIETCLGDERNECKLSDQRAALSCGQ
NPLPIYLTINVK DDVSNQDFREWFESPYEVGLQKYGAFIPSEFGSEFFMGRLVKRIPESR
ICYMLGLWSSIFSLNLLDAW NLSHTSEEFFHRWTREKVQDIEDEPILPEIPKCDANILETT
VVIPGSWLSNSFREILTHRSFVSEFHNFL SGLQLHTNYLQNGQFSRWKDTVLDGFPNQL
TESANHLCLLDTAFFVNSSYPPLLRPERKADLI IHLNYCA GSQTKPLKQTCEYCTVQNI
PFPKYELPDENENLKECYLMENPQEPDAPIVTFPPLINDTFRKYKAPGVER SPEELEQ
QVDIYGPKTPYATKELTYTEATFDKLVKLESEYNILNNKDTLLQALRLAVEKKRKLKGCPS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8042_b09.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001080490

ORF Size: 2517 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_001080490.1](#), [NP_001073959.1](#)

RefSeq Size: 2520 bp

RefSeq ORF: 2519 bp

Locus ID: 123745

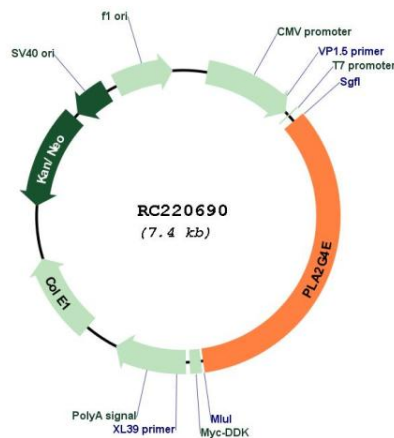
Cytogenetics: 15q15.1

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

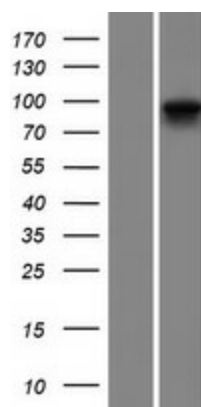
MW: 95.7 kDa

Gene Summary: This gene encodes a member of the cytosolic phospholipase A2 group IV family. Members of this family are involved in regulation of membrane tubule-mediated transport. The enzyme encoded by this member of the family plays a role in trafficking through the clathrin-independent endocytic pathway. The enzyme regulates the recycling process via formation of tubules that transport internalized clathrin-independent cargo proteins back to the cell surface. [provided by RefSeq, Jan 2017]

Product images:



Circular map for RC220690



Western blot validation of overexpression lysate (Cat# [LY421045]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220690 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).