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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
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ATGCGCGCCAAGTGCATTACAGAACCAGTAGGTATAGAGCTGGCACCCTGCCTGCAGGCTCCCAGCGTAC
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AGGGTTCAAGAGGGCTGAGCAGGTTCCTGTGAGCCAGACAGACTGTTTTGTGAGCCTCTGGCTGCCCACC
GCCTCTCAGAAGAAGCTGAGGACAAGGACCATCTCCAACTGCCCAAATCCAGAGTGGAATGAAAGCTTCA
ACTTCCAGATCCAGAGCCGAGTGAAGAACGTGCTAGAGTTGAGTGTCTGTGATGAAGACACAGTGACACC
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CAGCGTGTCCGGCCCTGCTTGGAACCCTGCTGCCCAACCTCTGCCTGCTTCCAAACCGCTGCCTGCTTCC
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

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

MRAKCITEPVGIELAPCLQAPSVPETDLKGVVQARGGGASVLEKPREGFKRAEQVPVSQTDCFVSLWLPT
ASQKKLRTRTISNCPNPEWNESFNFQIQSRVKNVLELSVCDEDTVTPDDHLLTVLYDLTKLCFRKKTHVK
FPLNPQGMEELEVEFLLEESPSPPETLVTNGVLVSRQVSCLEVHAQSRRRRKREKMKDLLVMVNESFENT
QRVRPCLEPCCPTSACFQTAACFHYPKYFQSQVHVEVPKSHWSCGLCCRSRKKGPISQPLDCLSDGQVMT
LPVGESYELHMKSTPCPETLDVRLGFSLCPAELEFLQKRKVVVAKALKQVLQLEEDLQEDEVPLIAIMAT
GGGTRSMTSMYGHLLGLQKLNLLDCASYITGLSGATWTMATLYRDPDWSSKNLEPAIFEARRHVVKDKLP
SLFPDQLRKFQEELRQRSQEGYRVTFTDFWGLLIETCLGDERNECKLSDQRAALSCGQNPLPIYLTINVK
DDVSNQDFREWFEFSPYEVGLQKYGAFIPSELFGSEFFMGRLVKRIPESRICYMLGLWSSIFSLNLLDAW
NLSHTSEEFFHRWTREKVQDIEDEPILPEIPKCDANILETTVVIPGSWLSNSFREILTHRSFVSEFHNFL
SGLQLHTNYLQNGQFSRWKDTVLDGFPNQLTESANHLCLLDTAFFVNSSYPPLLRPERKADLIIHLNYCA
GSQTKPLKQTCEYCTVQNIPFPKYELPDENENLKECYLMENPQEPDAPIVTFFPLINDTFRKYKAPGVER
SPEELEQGQVDIYGPKTPYATKELTYTEATFDKLVKLSEYNILNNKDTLLQALRLAVEKKKRLKGQCPS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

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

Restriction Sites: SgfI-MluI

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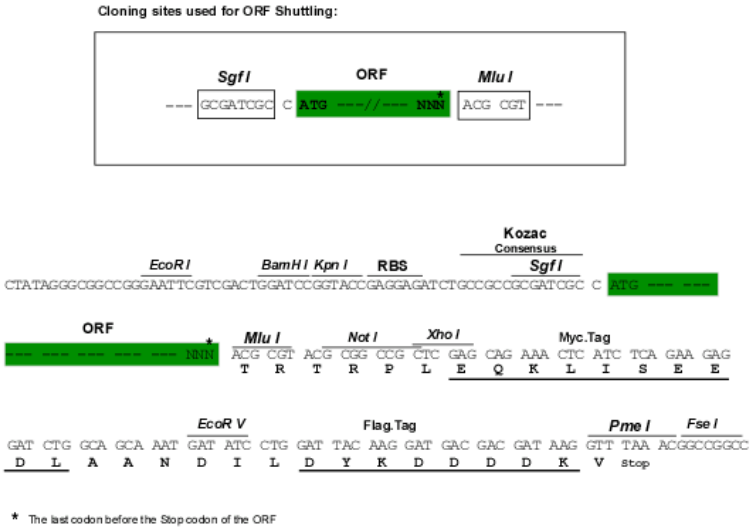
Cloning Scheme:



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).

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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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
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]

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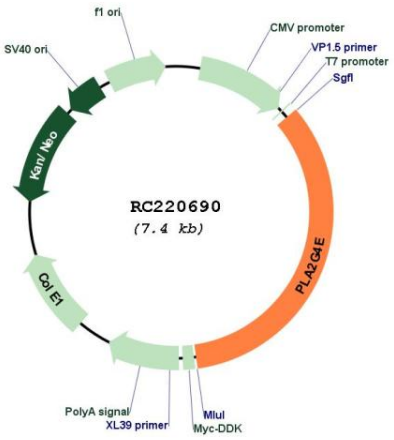
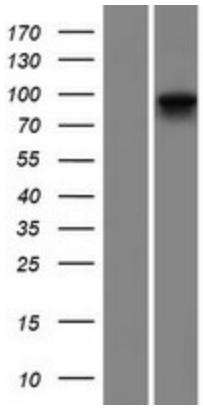
Product images:



Circular map for RC220690



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

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