OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC210905

PLA2G12B (NM_032562) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PLA2G12B (NM_032562) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PLA2G12B
Synonyms:	FKSG71; GXIIB; GXIIIsPLA2; PLA2G13; sPLA2-GXIIB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC210905 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGCTGGCCAGTGGCTTCTTGGTTTTGTGGCTCAGCCTTGGGGGTGGCCTGGCTCAGAGCGACACGA
GCCCTGACACGGAGGAGTCCTATTCAGACTGGGGCCTTCGGCACCTCCGGGGAAGCTTTGAATCCGTCAA
TAGCTACTTCGATTCTTTTCTGGAGCTGCTGGGAGGGAAGAATGGAGTCTGTCAGTACAGGTGCCGATAT
GGAAAGGCACCAATGCCCAGACCTGGCTACAAGCCCCAAGAGCCCAATGGCTGCGGCTCCTATTTCCTGG
GTCTCAAGGTACCAGAAAGTATGGACTTGGGCATTCCAGCAATGACAAAGTGCTGCAACCAGCTGGATGT
CTGTTATGACACTTGCGGTGCCAACAAATATCGCTGTGATGCAAAATTCCGATGGTGTCTCCACTCGATC
TGCTCTGACCTTAAGCGGAGTCTGGGCTTTGTCTCCAAAGTGGAAGCAGCCTGTGATTCCCTGGTTGACA
CTGTGTTCAACACCGTGTGGACCTTGGGCTGCCGCCCCTTTATGAATAGTCAGCGGGCAGCTTGCATCTG
TGCAGAGGAGGAGAAGGAAGAGTTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC210905 protein sequence
Red=Cloning site Green=Tags(s)

MKLASGFLVLWLSLGGGLAQSDTSPDTEESYSDWGLRHLRGSFESVNSYFDSFLELLGGKNGVCQYRCRY
GKAPMPRPGYKPQEPNGCGSYFLGLKVPESMDLGIPAMTKCCNQLDVCYDTCGANKYRCDAKFRWCLHSI
CSDLKRSLGFVSKVEAACDSLVDTVFNTVWTLGCRPFMNSQRAACICAEEEKEEL

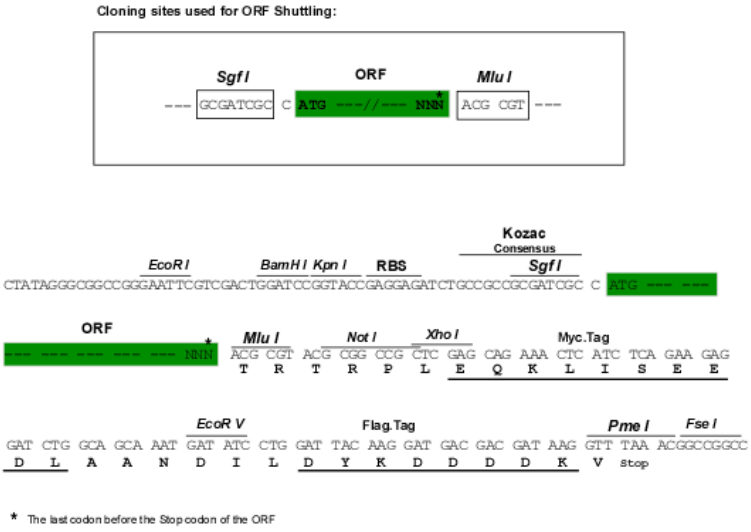
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

View online »

Chromatograms: https://cdn.origene.com/chromatograms/mk6383_b01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_032562

ORF Size: 585 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_032562.5

RefSeq Size: 1092 bp

RefSeq ORF: 588 bp

Locus ID: 84647

UniProt ID: Q9BX93

Cytogenetics: 10q22.1

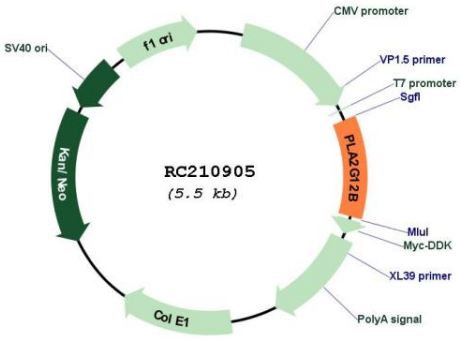
Protein Families: Secreted Protein

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

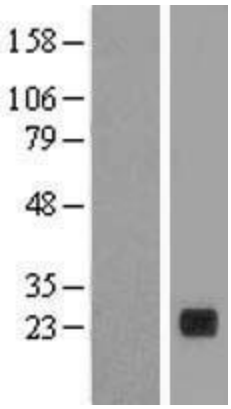
MW: 21.7 kDa

Gene Summary: The protein encoded by this gene belongs to the phospholipase A2 (PLA2) group of enzymes, which function in glycolipid hydrolysis with the release of free fatty acids and lysophospholipids. This family member has altered phospholipid-binding properties and is catalytically inactive. The protein is secreted, and together with microsomal triglyceride transfer protein, it functions to regulate HNF4alpha-induced hepatitis C virus infectivity. The expression of this gene is down-regulated in various tumors, suggesting that it may function as a negative regulator of tumor progression. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Dec 2015]

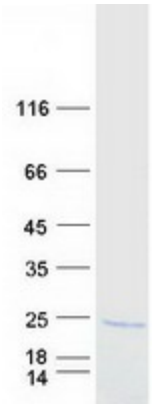
Product images:



Circular map for RC210905



Western blot validation of overexpression lysate (Cat# [LY409997]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210905 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PLA2G12B protein (Cat# [TP310905]). The protein was produced from HEK293T cells transfected with PLA2G12B cDNA clone (Cat# RC210905) using MegaTran 2.0 (Cat# [TT210002]).