

Product datasheet for RC202955

PLA2G12A (NM_030821) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PLA2G12A (NM_030821) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: PLA2G12A
Synonyms: GXII; PLA2G12; ROSSY
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC202955 representing NM_030821
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCCCTGCTCTCGCGCCCGCCTCACCTCCTGCTCCTCCTCATGGCCGCTGTTGTCAGGTGCCAGG
 AGCAGGCCAGACCAGGACTGGAGAGCCACCCTGAAGACCATCCGGAACGGCGTTCATAAGATAGACAC
 GTACCTGAACGCCGCTTGGACCTCTGGGAGGCGAGGACGGTCTCTGCCAGTATAAATGCAGTGACGGA
 TCTAAGCCTTTCCACGTTATGGTTATAAACCTCCCCACCGAATGGATGTGGCTCTCCACTGTTGGTG
 TTCATCTTAACATTGGTATCCCTCCCTGACAAAGTGTGCAACCAACACGACAGGTGCTATGAGACCTG
 TGGCAAAAGCAAGATGACTGTGATGAAGAATTCCAGTATTGCCTCTCCAAGATCTGCCGAGATGTACAG
 AAAACTAGGACTAACTCAGCATGTTCAGGCATGTGAAACAACAGTGGAGCTCTGTTTGACAGTGTTA
 TACATTTAGGTTGTAACCATATCTGGACAGCCAACGAGCCGATGCAGGTGTCATTATGAAGAAAAAC
 TGATCTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC202955 representing NM_030821
 Red=Cloning site Green=Tags(s)

MALLSRPALLLLLLMAAVVRCQEQAQTTDWRATLKTIRNGVHKIDTYLNAALDLLGGEDGLCQYKCSDG
 SKPFPRYGYPSPNGCGSPLFGVHLNIGIPSLTKCCNQHDRCYETCGSKNDCDEEFQYCLSKICRDVQ
 KTLGLTQHVVQACETTVELLFDVSIHLGCKPYLDSQRAACRCHYEKTDL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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Chromatograms: https://cdn.origene.com/chromatograms/mg3524_f03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_030821

ORF Size: 567 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:

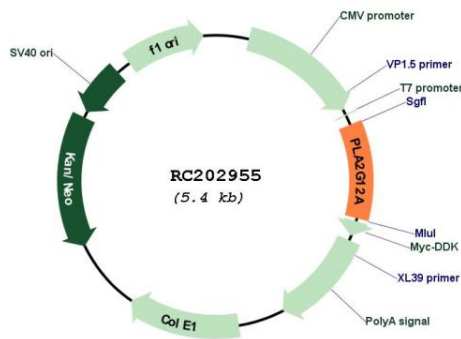
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

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

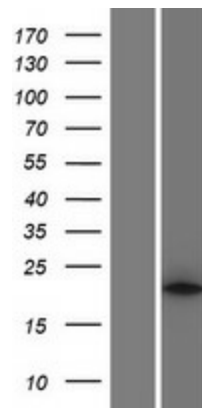
RefSeq: [NM_030821.5](#)

RefSeq Size: 1699 bp

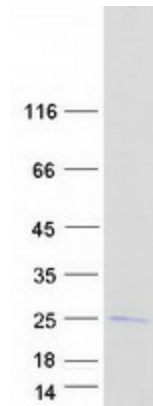
RefSeq ORF:	570 bp
Locus ID:	81579
UniProt ID:	Q9BZM1
Cytogenetics:	4q25
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	alpha-Linolenic acid metabolism, Arachidonic acid metabolism, Ether lipid metabolism, Fc epsilon RI signaling pathway, Glycerophospholipid metabolism, GnRH signaling pathway, Linoleic acid metabolism, Long-term depression, MAPK signaling pathway, Metabolic pathways, Vascular smooth muscle contraction, VEGF signaling pathway
MW:	20.9 kDa
Gene Summary:	Secreted phospholipase A2 (sPLA2) enzymes liberate arachidonic acid from phospholipids for production of eicosanoids and exert a variety of physiologic and pathologic effects. Group XII sPLA2s, such as PLA2G12A, have relatively low specific activity and are structurally and functionally distinct from other sPLA2s (Gelb et al., 2000 [PubMed 11031251]).[supplied by OMIM, Mar 2008]

Product images:


Circular map for RC202955



Western blot validation of overexpression lysate (Cat# [LY410681]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202955 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PLA2G12A protein (Cat# [TP302955]). The protein was produced from HEK293T cells transfected with PLA2G12A cDNA clone (Cat# RC202955) using MegaTran 2.0 (Cat# [TT210002]).