

Product datasheet for MR228107

Pla2g10 (NM_001291009) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Pla2g10 (NM_001291009) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Pla2g10
Synonyms: GX sPLA2; mGXs; PLA; PLA2GX; sPLA2-X
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR228107 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCTGCTGCTACTGCTGCTGTTGCTGCTGGACCTGGACCCGGATTGAGCAAGCAACCAGGAGGTCAC
 ATGTATACAAGCGTGGACTCCTGGAGCTGGCAGGGACCTGGATTGTGTTGGCCTCGATCTCCGATGGC
 TTACATGAAGTATGGCTGTTATTGTGGCCTTGGTGGCCATGGAGAGCCACGTGACGCCATTGACTGGTGC
 TGCTACCAACACGACTGCTGCTACTCTCGGGCTCAGGACGCTGGCTGCAGCCCTAAGTTAGACCGCTACC
 CATGGAAGTGCATGGACCATCACATCCTGTGTGGTGAGTGCCCTATGCCGTGTGACTTCCCAAGTGCCC
 ACTGGACATCCTGCAGATCCCAATGGCTCCTGTACCCTTGTGGACCAGCAGAGAACAATGCCAAGAAGT
 TTTGTGCAGGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR228107 protein sequence
 Red=Cloning site Green=Tags(s)

MLLLLLLLLLGPFGFSEATRRSHVYKRGLLELAGTLDCVGRSPMAYMNYGCYGLGGHGEPRDAIDWC
 CYHHDCCYSRAQDAGCSPKLDPRYPWKMDHHILCGECPMPDFPKCPLDILQIPMAPVPLWTSREQMPRT
 FVQV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI


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Cloning Scheme:



ACCN: NM_001291009

ORF Size: 432 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_001291009.2](#), [NP_001277938.1](#)

RefSeq Size: 1504 bp

RefSeq ORF: 435 bp

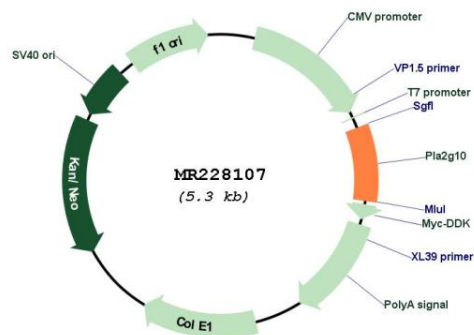
Locus ID: 26565

Cytogenetics: 16 9.5 cM

MW: 16.2 kDa

Gene Summary: This gene encodes a member of the phospholipase A2 family of lipolytic enzymes that hydrolyzes glycerophospholipids to produce free fatty acids and lysophospholipids. The encoded protein undergoes proteolytic processing to generate a calcium-dependent enzyme that plays pivotal roles in the liberation of arachidonic acid from membrane phospholipids leading to the production of various inflammatory lipid mediators, such as prostaglandins. In response to myocardial ischemia/reperfusion, mice lacking the encoded protein display a reduction in myocardial infarct size partly through the suppression of neutrophil cytotoxic activities. Alternative splicing results in multiple transcript variants encoding different isoforms. All of these isoforms may undergo similar processing to generate the mature protein. [provided by RefSeq, Jul 2015]

Product images:



Circular map for MR228107