

## Product datasheet for **MR226157**

### Pla2g10 (NM\_011987) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Pla2g10 (NM\_011987) 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:** >MR226157 representing NM\_011987  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGCTGCTGCTACTGCTGCTGTTGCTGCTGGGACCTGGACCCGGATT**CAGCGAAGCAACCAGGAGGTCAC**  
ATGTATACAAGCGTGGACTCCTGGAGCTGGCAGGGACCTGGATTGTGTTGGCCCTCGATCTCCGATGGC  
TTACATGAACTATGGCTGTTATTGTGGCCTTGGTGCCATGGAGAGCCACGTGACGCCATTGACTGGTGC  
TGCTACCACCACGACTGCTGCTACTCTCGGGCTCAGGACGCTGGCTGCAGCCCTAAGTTAGACCGCTACC  
CATGGAAGTGCATGGACCATCACATCCTGTGTGGACCAGCAGAGAACAAATGCCAAGAACTTTTGTGCAG  
GTGTGACGAGGAGCTGGCTTACTGCCTGGCAGGGACCGAGTACCACCTGAAATACCTCTTCTCCCTCC  
ATTTTATGTGAGAAGGACTCTCCCAAGTCAAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR226157 representing NM\_011987  
Red=Cloning site Green=Tags(s)  
MLLLLLLLLLLGPDPGFSEATRRSHVYKRGLLELAGTLDCVGRSPMAYMNYGCYGLGGHGEPRDAIDWC  
CYHHDCCYSRAQDAGCSPKLDPRYPWKMDHHILCGPAENKCQELLCRCDEELAYCLAGTEYHLKYLFFPS  
ILCEKDSPKCN

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

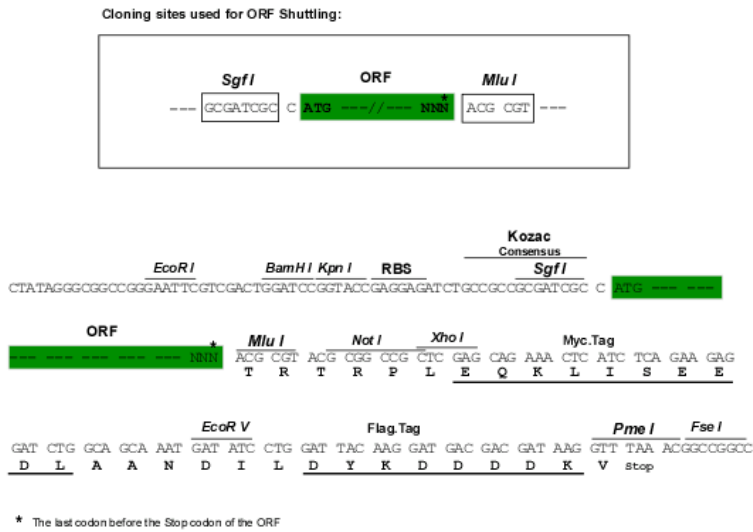
**Chromatograms:** [https://cdn.origene.com/chromatograms/ja2231\\_h03.zip](https://cdn.origene.com/chromatograms/ja2231_h03.zip)



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**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_011987

**ORF Size:** 453 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_011987.4](#), [NP\\_036117.1](#)

**RefSeq Size:** 1022 bp

**RefSeq ORF:** 456 bp

**Locus ID:** 26565

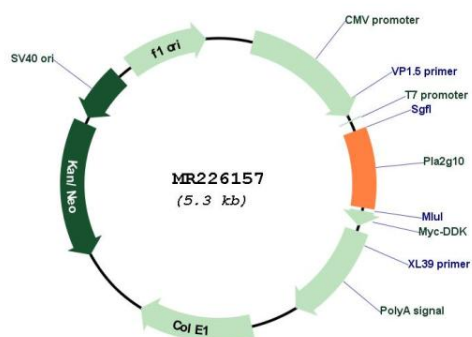
**UniProt ID:** [Q9QXX3](#)

**Cytogenetics:** 16 9.5 cM

**MW:** 17.5 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 MR226157