

Product datasheet for **RR212937**

Pnpla2 (NM_001108509) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pnpla2 (NM_001108509) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pnpla2
Synonyms:	RGD1309044
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR212937 representing NM_001108509
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTTCCCAAGGGAGACCAAGTGAACATCTCGTTCGCTGGCTGCGGCTTCTCGGGGTCTACCACATTG
 GAGTGGCTCCTGCCTCCGTGAGCACGGCCCTTCTGGTGGCCAACGCCACTCACATCTACGGAGCCTC
 GGCAGGGGCGCTTACCGCCACAGCGCTGGTCACTGGGGCTGCCTGGGCGAAGCGGGTGCCAACATTATT
 GAGGTGTCCAAGGAGGCTCGGAAGCGGTTCTGGGTCCCCTGCACCCCTCCTTCAACCTGGTAAAGACCA
 TCCGTGGTTGTCTACTGAAGACCCTGCCTGCTGATTGCCACACGCGTGCCAGCGGACGCCTGGGCATCTC
 CCTGACTCGAGTTTCGGATGGAGAGAATGTCATCATATCGCACTTTAGCTCCAAGGATGAGCTTATCCAG
 GCCAATGTTTGCAGCACTTTATCCCTGTGTACTGTGGCCTATTCTCTACCCCTTCAAGGGGTGCGCT
 ATGTGGATGGCGCATTTAGACAACCTGCCACTTTATGAGCTGAAGAATACCATCACAGTGTCCCATT
 CTCAGGGGAGAGTGACATCTGCCACAAGACAGCTCCACCAACATCCACGAACCTCGTATACCAACACC
 AGCATCCAATCAACCTGCGCAATCTCTACCGCTCTCGAAGGCTCTCTTCCCGCCAGAGCCCATGGTTC
 TCCGAGAGATGTGCAACAGGGCTACCGAGATGGACTTCGATTCTTAGGAGGAATGGCCTACTGAACCA
 ACCCAACCCTTTGCTGGCACTGCCCCCGGTTGTCCCCAGGAAGAGGATGCAGAGGAAGCTGCCGTGACT
 GAGGAGAGGACTGGAGGGGAGGATCGGATTCTAGAGCACTGCCTGCCAGACTCAACGAGGCCCTGCTGG
 AGGCCTGTGTGGAACCGAAAGACCTGATGACCACCTTTCCAACATGCTGCCAGTGCCTGGCCACTGC
 CATGATGGTACCCTATACTCTGCCACTGGAGAGCGCAGTGTCTTACCATCCGTTTGTGGAGTGGCTG
 CCTGATGTCCCTGAGGATATCCGGTGGATGAAGGAGCAGACAGGTAGCATCTGCCAGTATCTGGTGATGA
 GGGCAAGAGGAATTTGGGTGACCATCTACCTCCAGACTGTCTGAGCAGTGGAGCTGGCGGTGCCCA
 GTCTCTGCCGTCTGTGCCACTGTCTTGGCCACCTACAGTGAGGCACTGCCCAACTGGGTACGAAACAAC
 CTCTACTGGGGACGCGCTGGCCAAGTGGGAAGAATGCCAGCGTCAGCTACTGTGGGTCTCTTCTGCA
 CCAATGTGGCCTTCCCGCTGATGCCTTGCATGCGCGCACCTGCCAGCCCCACCGCCACAGATCTGCG
 CACCCACAGGATCCATCTGGCCTCCACCTTGC

AG**GCGACCG**ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR212937 representing NM_001108509
 Red=Cloning site Green=Tags(s)

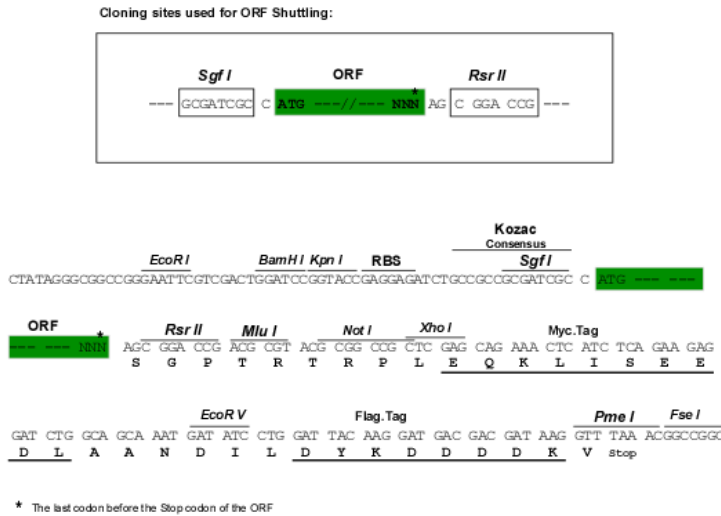
MFPRETKWNISFAGCGFLGVYHIGVASCLREHAPFLVANATHIYGASAGALTATALVTGAACLGEAGANII
 EVSKEARKRFLGPLHPSFNLVKIRGCLLKTLPADCHTRASGRLGISL TRVSDGENVIISHFSSKDELIQ
 ANVCSTFIPVYCGLIPTLQGVRYVDGGISDNLPL YELKNTITVSPFSGESDIPQDSSSTNIHELRI
 SIQFNLRNLYRLSKALFPPEPMVLREMCKQGYRDGLRFLRRNGLLNQPNPLLALPPVVPQEEDAEEAAVT
 EERTGGEDRILEHLPARLNEALLEACVEPKDLMTLSNMLPVRLATAMMVPYTLPLESAVSFTIRLLEWL
 PDVPEDIRWMKEQTGSICQYLVMRAKRKLGDHLP SRLSEQVELRRAQSLPSVPLSCATYSEALPNWVRNN
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SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

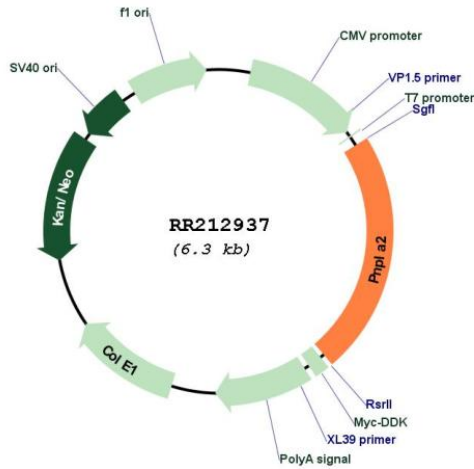
Restriction Sites:

SgfI-RsrII

Cloning Scheme:



Plasmid Map:



ACCN: NM_001108509

ORF Size: 1434 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_001108509.2](#), [NP_001101979.2](#)

RefSeq Size: 2231 bp

RefSeq ORF: 1437 bp

Locus ID: 361676

UniProt ID: [P0C548](#)

Cytogenetics: 1q41

MW: 52.6 kDa

Gene Summary: Catalyzes the initial step in triglyceride hydrolysis in adipocyte and non-adipocyte lipid droplets. Also has acylglycerol transacylase activity. May act coordinately with LIPE/HLS within the lipolytic cascade. Regulates adiposome size and may be involved in the degradation of adiposomes. May play an important role in energy homeostasis. May play a role in the response of the organism to starvation, enhancing hydrolysis of triglycerides and providing free fatty acids to other tissues to be oxidized in situations of energy depletion.
[UniProtKB/Swiss-Prot Function]