

## Product datasheet for **MG226260**

### **Pnpla2 (NM\_001163689) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Pnpla2 (NM_001163689) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pnpla2
Synonyms:	0610039C21Rik; 1110001C14Rik; Atgl; TTS-2.2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG226260 representing NM\_001163689  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTTCCCGAGGGAGACCAAGTGAACATCTCATTGCTGGCTGCGGCTTCTCGGGTCTACCACATTG  
 GCGTGGCCTCCTGCCTCGGTGAGCACGCGCCCTTCTGGTGGCCAACGCCACTCACATCTACGGAGCCTC  
 GGCAGGGGCGCTCACCGCCACAGCGCTGGTCACTGGGCGCTGCCTGGGTGAAGCAGGTGCCAACATTATT  
 GAGGTGTCCAAGGAGGCCGGAAGCGGTTCTGGGTCTCTGCATCCCTCCTTCAACCTGGTGAAGACCA  
 TCCGTGGTGTCTACTAAAGACCCTGCCTGCTGATTGCCATGAGCGGCCAATGGACGCCTGGGCATCTC  
 CCTGACTCGTGTTCAGACGGAGAGAACGTCATCATATCCCCTTTAGCTCCAAGGATGAGCTCATCCAG  
 GCCAATGTCTGCAGCACATTTATCCCGGTACTGTGGCCTCATTCTCTACCTCCAAGGGTGCCT  
 ATGTGGATGGCGCATTTAGACAACCTGCCACTTTATGAGCTGAAGAATACCATCACAGTGTCCCATT  
 CTCAGGCGAGAGTGACATCTGCCCTCAGGACAGCTCCACCAACATCCACGAGCTTCGCGTACCAACACC  
 AGCATCCAGTTCAACCTTCGCAATCTCTACCGCCTCTCGAAGGCTCTTCCCGCCAGAGCCCATGGTCC  
 TCCGAGAGATGTCAAACAGGGCTACAGAGATGGACTTCGATTCTTAGGAGGAATGGCCTACTGAACCA  
 ACCCAACCTTTGCTGGCACTGCCCCAGTTGTCCCCAGGAAGAGGATGCAGAGGAAGCTGCTGTGGTG  
 GAGGAGAGGGCTGGAGAGGAGGATCAATTGCAGCCTTATAGAAAAGATCGAATTCAGAGCACCTGCCTG  
 CCAGACTCAATGAGGCCCTGCTGGAGGCCCTGTGTGAACCAAGGACCTGATGACCACCTTTTCAAACAT  
 GCTACCACTGCGCCTGGCAACGGCCATGATGGTGCCTATACTCTGCCGCTGGAGAGTGCAGTGTCTTC  
 ACCATCCGTTGTTGGAGTGGCTGCCTGATGTCCCTGAAGATATCCGGTGGATGAAAGAGCAGACGGGTA  
 GCATCTGCCAGTATCTGGTGTGAGGGCCAAGAGGAAATTGGGTGGCCATCTGCCTTCCAGACTGTCTGA  
 GCAGGTGGAACCTGCGACGTGCCAGTCTCTGCCCTCTGTGCCACTGTCTTGCGCCACCTACAGTGGGCC  
 CTACCCAACCTGGGTACGAAACAACCTCTCACTGGGGGACGCGCTGGCCAAGTGGGAAAGTGGCAGCGTC  
 AGCTACTGCTGGGTCTTCTTGACCAATGTGGCCTTCCCGCGGATGCCTTGGCATGCGCGCACCTGC  
 CAGCCCCACTGCCGAGATCCTGCCACCCACAGGATCCACCTGGCCTCCCGCCTTGC

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>MG226260 representing NM\_001163689  
 Red=Cloning site Green=Tags(s)

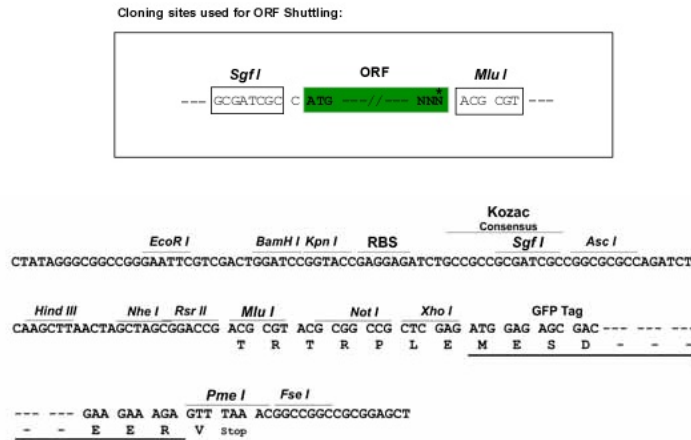
MFPRETKWNISFAGCGFLGVYHIGVASCLREHAPFLVANATHIYGASAGALTATALVTGACLGEAGANII  
 EVSKEARKRFLGPLHPSFNLVKIRGCLLKLTPADCHERANGRLGISL TRVSDGENVIISHFSSKDELIQ  
 ANVCSTFIPVYCGLIPTLQGVRYVDGGISDNLPLYELKNTITVSPFSGESDIPCQDSSTNIHELVRTNT  
 SIQFNLRNLYRLSKALFPPEPMVLREMCKQGYRDGLRFLRRNGLLNQPNLLALPPVVPQEEDAEEAAVV  
 EERAGEEDQLQPYRKDRILEHLPARLNEALLEACVEPKDLMTTLSNMLPVRLATAMMVPYTLPLESAVSF  
 TIRLLEWLPDVPEDIRWMKEQTGSICQYLVMRAKRLGGHLPSRLSEQVELRRAQSLPSVPLSCATYSEA  
 LPNWRNRLSLGDALAKWEECQRQLLLGLFCTNVAFPDALRMRAPASPTAADPATPQDPPGLPPC

**TRTRPLE** - GFP Tag - V

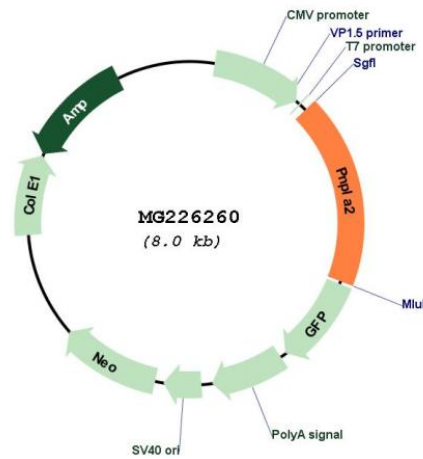
**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001163689

**ORF Size:** 1458 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\\_001163689.1](#), [NP\\_001157161.1](#)

**RefSeq Size:** 2635 bp

**RefSeq ORF:** 1461 bp

**Locus ID:** 66853

**UniProt ID:** [Q8BJ56](#)

**Cytogenetics:** 7 F5

**Gene Summary:** Catalyzes the initial step in triglyceride hydrolysis in adipocyte and non-adipocyte lipid droplets (PubMed:15550674). 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]