

Product datasheet for **MG207402**

Plin5 (NM_001077348) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Plin5 (NM_001077348) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Plin5
Synonyms:	2310076L09Rik; AI415325; AW109675; Lsdp5; MLDP; PAT-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG207402 representing NM_001077348
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCGGGTGATCAGACAGCTCAGGACCCTGGATCCAGCCTGGGAGAAGTGGACCAGCAGAATGTGGTGA
 ATCGAGTGGTGGCTTTGCCCTGGTCAAGGCCAGGTGCACTGCCGTGTCCAGTGCTTACAACTCGGCCAA
 GGACAGGCACCCGCTGCTGGGCTCCGCCTGCCGCTTGCTGAGCACTGTGTGTAGTGTGACTACCTGT
 GCCCTGGACCACGCACAGCCACTGCTGGAGCACCTGCAGCCCCAGTTGGCCACAGTGAATGATCTTGCT
 GCAGGGGACTAGACAAATTGGAAGAGAAGCTGCCCTTCTGCAGCAGCCATCAGACATGGTGGTGACATC
 AGCCAAGGATACAGTGGCCAAAAGTGTACAGGCATGGTGGACCTGGCCCAAAGGGGCCGGCTGGAGT
 GGGGAGCTGAGGCGCTCCATGAGTCAAGCCATGGACATGGTGTGGCAAGTCGGAGAAGCTGGTGGACC
 GCTTCTGCCCATGACTGAGGCTGAGCTAGCAGTCTGGCAGCTGAGGCCGAGGGCCAGAAGTGGGCAC
 AGTGGAGGAGCAGAGGCAGCAACAGGGCTACTTTGTGCTCTGGGGTCCCTATCGGCACGCTCCGCCAT
 CTCGCCTATGAACACTCTTTGGGGAAACTGAGGCAGAGCAACACCGTACCCAGGAGATGCTGGCCACGC
 TGCAGGAAACGCTGGAGCTGATCCAGCATATGCAGAGAGGGGCAAGCCCTAGCCCTACTTTCCATCCCCC
 AAAGACTCAGGAGCTGTGGGGGAGCTGGAGCCCGTGTCTAGAGAATGGCCGCAGCCACAGTGAGGTGGAG
 CTGGAGACACTGGCTCTGTCTCGAAGTTTGACCTGGAGCTGCAGAAATGCAGTGGATGCCCTGGCAGGCT
 GTGTTTCGGGGCCTGCCACCTAGTGCCAGGCCAAGGTGGTGGTGCAGCGCAGCGTGGATGCTCTACA
 GGCCACCTTTGCTGATGCACACTGCCTTGGTGTGTGGCACCCACTGCTCTGGCTGAGGGCCGGGGCAGT
 GTGGCCCGGGCACATGCCTGTGTGGATGAGTTCCTGGATTGGTCTGCGGGCCATGCCACTGCCCTGGC
 TTGTGGGGCCCTTGCACCCATCCTGGTGAACAGTCGGAGCCCTGATCAACCTGGCCACCTGTGTGGA
 CGAGGTGGTGGTGACCCTGATCTCGCTGGGCACACATGGACTGGCCAGCCAGAGAGGGCCTGGGAG
 GCTGAGCTGCAGATCCTGGGGGCAAGAGGCTGAGCCCCAAGGGGCAAGGCAAGCACACAATGATGC
 CAGAGCTGGACTTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG207402 representing NM_001077348
 Red=Cloning site Green=Tags(s)

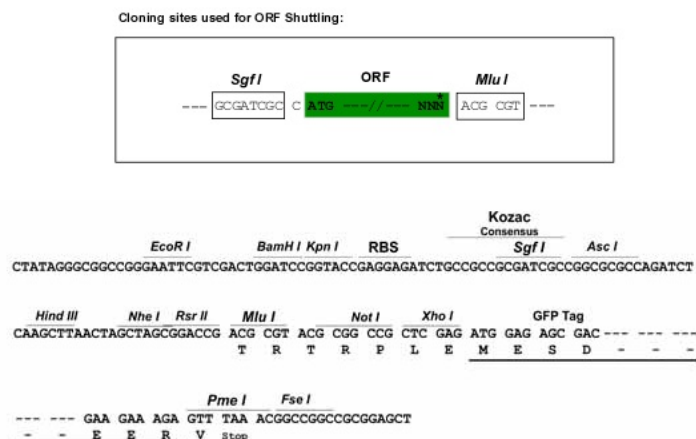
MSGDQTAQDPGSSLGELDQQNVNVRVVALPLVKATCTAVSSAYNSAKDRHPLLGSACRLAEHCVCVSTTC
 ALDHAQPLLEHLQPLATVNDLACRGLDKLEELPFLQQPSDMVVTSAKDTVAKSVTGMVDLAQRGRWS
 GELRRSMSQAMDVLGKSEKLVDRFLPMTEAELAVLAAEAGPEVGTVEEQRQQQGYFVRLGSLSARLRH
 LAYEHSGLKLRQSKHRTQEMLAQLQETLELIQHMQRGASPSPTFHPPKTQELWGSWSPCLENGRSHSEVE
 LETLALSRSLTLELQNAVDALAGCVRGLPPSAQAKVAEVQRSVDALQATFADAHCLGDVAPTALAEGRGS
 VARAHACVDEFLDLVLRAMPLPWLVGPFAPILVEQSEPLINLATCVDEVVGDPPRWAHMDWPAQKRAWE
 AESADPGGQEAEPFRGQKHTMPELDF

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM 001077348

ORF Size: 1344 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_001077348.1](#), [NP_001070816.1](#)

RefSeq Size: 1994 bp

RefSeq ORF: 1392 bp

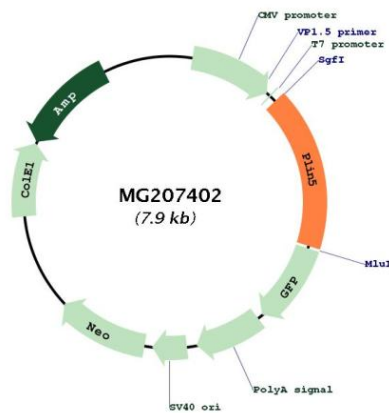
Locus ID: 66968

UniProt ID: [Q8BVZ1](#)

Cytogenetics: 17 D

Gene Summary: Lipid droplet-associated protein that maintains the balance between lipogenesis and lipolysis and also regulates fatty acid oxidation in oxidative tissues. Recruits mitochondria to the surface of lipid droplets and is involved in lipid droplet homeostasis by regulating both the storage of fatty acids in the form of triglycerides and the release of fatty acids for mitochondrial fatty acid oxidation. In lipid droplet triacylglycerol hydrolysis, plays a role as a scaffolding protein for three major key lipolytic players: ABHD5, PNPLA2 and LIPE. Reduces the triacylglycerol hydrolase activity of PNPLA2 by recruiting and sequestering PNPLA2 to lipid droplets. Phosphorylation by PKA enables lipolysis probably by promoting release of ABHD5 from the perilipin scaffold and by facilitating interaction of ABHD5 with PNPLA2. Also increases lipolysis through interaction with LIPE and upon PKA-mediated phosphorylation of LIPE.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG207402