

Product datasheet for **MR207402**

Plin5 (NM_001077348) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Plin5 (NM_001077348) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Plin5
Synonyms:	2310076L09Rik; AI415325; AW109675; Lsdp5; MLDP; PAT-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>MR207402 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGC**C

ATGGACCAGAGAGGTGAAGACACCACCCTAGCGCCACACAGCAGAATGTCCGGTGATCAGACAGCTCAGG
 ACCCTGGATCCAGCCTGGGAGAACTGGACCAGCAGAATGTGGTGAATCGAGTGGTGGCTTTGCCCTGGT
 CAAGGCCACGTGCACTGCCGTGTCCAGTGCTTACAACCGGCCAAGGACAGGCACCCGCTGCTGGGCTCC
 GCCTGCCGCTTGTGAGCACTGTGTGTAGTGTGACTACCTGTGCCCTGGACCACGCACAGCCACTGC
 TGGAGCACCTGCAGCCCCAGTTGGCCACAGTGAATGATCTTGCCTGCAGGGGACTAGACAAATTGGAAGA
 GAAGCTGCCCTTCTGCAGCAGCCATCAGACATGGTGGTGACATCAGCCAAGGATACAGTGGCCAAAAGT
 GTCACAGGCATGGTGGACCTGGCCAAAGGGGCCGGCGTTGGAGTGGGAGCTGAGGCGCTCCATGAGTC
 AAGCCATGGACATGGTGTGGCAAGTCGAGAAGCTGGTGGACCGCTTCTGCCATGACTGAGGCTGA
 GCTAGCAGTCTGGCAGCTGAGGCCGAGGGCCAGAAAGTGGGCACAGTGGAGGAGCAGAGGCAGCAACAG
 GGCTACTTTGTGCGTCTGGGGTCCCTATCGGCACGCTCCGCCATCTCGCTATGAACACTCTTTGGGGA
 AACTGAGGCAGAGCAACACCGTACCCAGGAGATGCTGGCCAGCTGCAGGAAACGCTGGAGCTGATCCA
 GCATATGCAGAGAGGGGCAAGCCCTAGCCCTACTTTCCATCCCCAAAGACTCAGGAGCTGTGGGGGAGC
 TGGAGCCCGTGTCTAGAGAATGGCCGACCCACAGTGAAGTGGAGCTGGAGACTGGCTCTGTCTCGAA
 GTTTGACCCTGGAGCTGCAGAATGCAGTGGATGCCCTGGCAGGCTGTGTTGCGGGCCTGCCACCTAGTGC
 CCAGGCCAAGTGGCTGAGGTGCAGCGCAGCGTGGATGCTCTACAGGCCACCTTTGCTGATGCACACTGC
 CTTGGTGATGTGGCACCCTGCTCTGGCTGAGGGCCGGGGCAGTGTGGCCGGGCACATGCCTGTGTGG
 ATGAGTTCTGGATTTGGTCTCGGGCCATGCCACTGCCCTGGCTTGTGGGGCCCTTTGACCCATCCT
 GGTGGAACAGTCGGAGCCCTGATCAACCTGGCCACCTGTGTGGACGAGGTGGTGGGTGACCCTGATCCT
 CGCTGGGCACACATGGAAGTGGCCAGCCAGAAAGAGGGCCTGGGAGGCTGAGTCTGCAGATCTGGGGGGC
 AAGAGGCTGAGCCCCAAGGGGGCAAGGCAAGCACACAATGATGCCAGAGCTGGACTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR207402 protein sequence
 Red=Cloning site Green=Tags(s)

MDQRGEDTTLAPHSRMSGDQTAQDPGSSLGELDQQNVVNRVVALPLVKATCTAVSSAYNSAKDRHPLLGS
 ACRLAEHCVCVSTTCALDHAQPLLEHLQPQLATVNDLACRGLDKLEELPFLQQPSDMVVTSAKDTVAKS
 VTGMVDLAQRGRWSGELRRSMSQAMDVLGKSEKLVDRFLPMTEAELAVLAAEAEGPEVGTVEEQRQQQ
 GYFVRLGSLSARLRHLAYEHSGLRQSKHRTQEMLAQLQETLELIQHMQRGASPSPTFHPPKTQELWGS
 WSPCLENGRSHSEVELETALSRSLTLELQNAVDALAGCVRGLPPSAQAKVAEVQRSVDALQATFADAHC
 LGDVAPTALAEGRGSVARAHACVDFLDLVLRA MPLPWLVGPFAPILVEQSEPLINLATCVDEVVGD PDP
 RWAHMDWPAQKRAWEAESADPGGQEAEP PRGQGKHTMPELDF

TRTRPLE**QKL**ISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_001077348

ORF Size: 1389 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 Size: 1994 bp

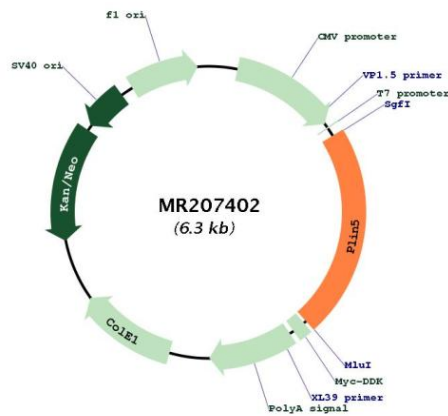
RefSeq ORF: 1392 bp

Locus ID: 66968

UniProt ID: [Q8BVZ1](#)

Cytogenetics:	17 D
MW:	50.5 kDa
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 MR207402