

## Product datasheet for **RR201130**

### Plin5 (NM\_001134637) Rat Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Plin5 (NM_001134637) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Plin5
Synonyms:	Oxpat
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RR201130 representing NM\_001134637  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGACCAGAGAGCAAAGACACCACCCTAGCTCTACACAGCAGGATGTCCGGTATCAGACAGCTCAGG  
 ACCCTGGATCCAGCCTGGGGAACTGGACCAGCACAACGTGGTGAAGCGAGTGGTGGCCTTGCCCTGGT  
 CAGGGCCACGTGCACTGTGTGTCTGGTGCCTACAACAGCAGCAAGGACAGGCACCCGCTGCTGGCTCT  
 GCCTGCCGCTTTGCTGAACACTGTGTGTAGTGTGGCTACCTGTGCCCTGGACCACGCACAGCCACTGC  
 TGGAGCACCTGCAGCCAAAGTTGGCCACAGTGAATGATCTTGCCTGCAGGGGACTAGACAAATTGGAAGA  
 GAAGCTGCCCTTCTGCAGCAGCCATCGGACACGGTGGTACCTCAGCCAAGGATGCAGTGGCCAAAAGT  
 GTCACAGGCGTGGTGGACCTGGCCAAAGGGGCCGGCGTTGGAGCGGGGAGCTGAGGCGCTCCGTGAGCC  
 AAGCCATGGACACTGTGCTGAGGCGCTCCGTGAGCCAAGCCATGGACACTGTGCTGGGCAAATCAGAGGA  
 GCTGGTGGACATTTCTGCCCATGACTGAAGCTGAGCTAGTGGCCCTGGCGACTGAGTCCAGGGCCCA  
 GAAGTGGGCTCAGTGGAGGAGCAGAGGCAGAAACAGGGCTACTTTGTGCGTCTGGGATCCCTATCGGCAC  
 GCCTCCGCCATCTTGCTATCAACTCTTTGGGAAACTGAGGGAGAGCAAACACCCGCCACCCAGGAGAT  
 GCTGGCCAGCTGCAGAAACTCTGGAGCTGATCCAGCATATGCAGAGTAGGGCAAGCCCCACCCCTACT  
 TTCCATACCCAAAGGTCAGGAGCTTTGCGGGGACTGGAGCCATGTCTGGAGAATGGTACCGCCACA  
 GCCAGGTGGAGCTGGAGACACTGGCTCTGTGAGAAGTCTGACCTGGAGCTGCAGAGTGCAGTGGATGC  
 CCTTGCAGGCTGTGTTGCGGGCCTGCCCTAGTGCCAGGCCAAGGTGGCTGAAGTGCAGCGCAGTGTG  
 GATGCTCTACAGCCACCTTTGCTGATGCACACTGCCTTGGTACGTGGCACCCTGCTCTGGCTGAGG  
 GCCAGGACAGCTGGCCAGGCACATGCCTGTGTGGATGAGTTCCTGGATTTGGTCTTGGCTGAGG  
 ACTGGCCTGGCTTGTGGGGCCCTTTGCGCCATCTTGGTGGAGCGGTGAGAGCCCTGATCAACCTGGCC  
 ACCTGTGTGGATGAGGTGGTGGGTGACCCTGACCCCGCTGGGCACACATGGACTGGCCAGCCAGCAGA  
 GGGCCTGGGAGGCTGAGCCTGCAGACCCTGGGGACAAGAGGCTGAGCCCCACTGGGCCAGGTCAAGCA  
 CACAATGATGCCAGAGCTAGACTTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RR201130 representing NM\_001134637  
 Red=Cloning site Green=Tags(s)

MDQRGKDTTLALHSRMSGDQTAQDPGSSLGELDQHNVVKRVVALPLVRATCTAVSGAYNSAKDRHPLLGS  
 ACRFAEHCVCSVATCALDHAQPLLEHLQPKLATVNDLACRGLDKLEEKLPFLQPPSDTVVTSAKDAVAKS  
 VTGVVDLAQRGRWSGELRRSVSQAMDTVLRSSVSQAMDTVLGKSEELVDHFLPMTEAELVALATESQGP  
 EVGSVEEQKQGYFVRLGSL SARLRHLAYQHSLGKLRRESKRTQEMLAQLQKTLELIQHMQSRASPTPT  
 FHHPKVQELCGDWSPLENGYRHSQVELETLALSRSLTLELQSAVDALAGCVRGLPPSAQAKVAEVQRVS  
 DALQATFADAHCLGDVAPTALAEQDSVAQAHACVDFLDLVLRAMPLAWLVGPFAPILVERSEPLINLA  
 TCVDEVVGDPPRWAHMDWPAQQRAWAEAPADPGGQEAEPPLGQVKHTMMPELDF

**TR**TRPLEQ**KL**I**SEEDLA**AND**ILDYK**DDDD**KV**

**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



ACCN: NM\_001134637

ORF Size: 1425 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\\_001134637.1](#), [NP\\_001128109.1](#)

RefSeq Size: 1937 bp

RefSeq ORF: 1428 bp

Locus ID: 501283

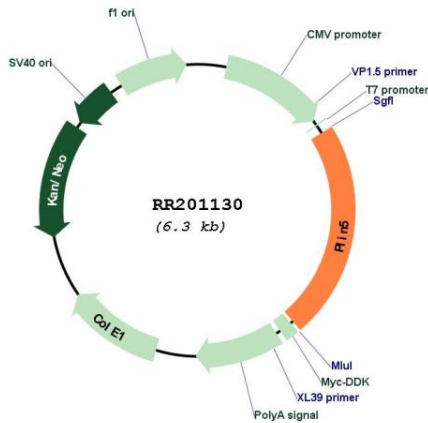
UniProt ID: [M0R7Z9](#)

**Cytogenetics:** 9q12

**MW:** 51.8 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 RR201130