

Product datasheet for **SC125492**

Lipin 1 (LPIN1) (NM_145693) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lipin 1 (LPIN1) (NM_145693) Human Untagged Clone
Tag:	Tag Free
Symbol:	Lipin 1
Synonyms:	PAP1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM_145693 edited
GGCAGCCGGCGGGCTGGGTGTTTGAATACAAAGGCGCCACGCGGGCGCCGCTCG
GTGCAGACCATGAATTACGTGGGCAGTTAGCCGCCAGGTGTTTGTACCGTGAAGGAG
CTCTACAAGGGGCTGAATCCCGCCACACTCTCAGGGTGCAATTGACATCATTGTACCCGC
CAGCCCAATGAAACCTCCAATGCTCCCTTTCCACGTCCGCTTTGGGAAGATGGGGTCT
CTGCGCTCCCAGAGAAAGTGGTTGACATAGAAATCAATGGGAATCTGTGGATTGCAT
ATGAAATTGGGAGATAATGGAGAAGCATTTTTTGTTCAGAAACAGATAATGATCAGGAA
GTTATCCCTATGCACCTGGCCACCTCCCCATCCTGTGAGAGGAGCTTCGAGAATGGAA
TGCCAGCTGAAAAGGGGCTCTGTGGACAGGATGAGAGGCCTGGACCCAGCACGCCAGCC
CAAGTGATCGCTCCAGCGAGACGCCGTCAAGCAGCTCTGTAGTAAAGAAGAGAAGAAAA
AGGAGGAGAAAGTACAGCTGGACAGCCTGAAGAGAGATGACAACATGAACACATCTGAG
GATGAGGACATGTTCCCATCGAGATGAGCTCGGATGAGGCCATGGAGCTGCTGGAGAGC
AGCAGAACTCTTCTAATGATATACCTCCATTCCAAGATGATATTCTGAGGAAAACCTC
TCCCTGGCTGTGATTTACCCTCAGTCAGCCTCATACCCTAATTCGGATAGAGAGTGGTCA
CCCCTCCAGTCTTCCGGTCCCGACCTTCAACACCTAAAAGTGATTGAGAATTGGTCA
AGCAAGTCCACGGAAAGGACAGGGCAGAAAGAACCCAGAAATGCTTTGGCTGTGGGAGAG
CTGCCGAGGCTGCTAAGTCTTCTTCCACACAAGATGAAAGAGTCCAGCCATTGAGC
TTTAGTGACCAATCGCCAACTCTGGTGGTGGGCACTTTTGGACCAGAACAAGCCTCAG
ACAGAAATGCAGTTTGTGAATGAAGAAGACCTGGAGACCTTAGGAGCAGCAGCGCCACTC
TTGCCATGATCGAGGAGCTCAAACCCCTCTGCCAGTGTAGTCCAGACAGCAAACAAG
ACGGATTCTCCTCCAGGAAAAGAGATAAACGAAGCCGACATCTTGGTGTGACGGCGTC
TACTTGGATGACCTCACAGACATGGATCCTGAAGTGGCGGCCCTGTATTTCCAAAAAC
GGAGATCCTTCCGGACTCGAAAACATGCAAGCGACAACGGAGCCCGGTGAGCAACCAG
TCCCGCAGTCGGTGGGAGCTCGGGCTGGACAGTGGCGTGGAGAGCACCTCGGACGGG
CTGAGGGACCTCCCTCCATCGCCATCTCCCTCTCGGGGGCCTCAGCGACCACCGGGAG
ATCACGAAAGATGCATTCTGGAGCAAGCTGTGTCATATCAACAGTTTGTGGACAACCC



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GCTATTATCGATGACCCCAATCTCGTGGTAAAGATTGGGAGTAAATATTATAAAGTGGACA
 ACAGCAGCACCCCTCCTCCTGGCAATGCAGGCCTTCCAGAAACCTTTGCCAAAGGCCACT
 GTGGAATCTATCATGAGGGATAAAATGCCAAAAAGGGAGGAAGATGGTGGTTTTTCATGG
 AGGGGAAGAAACACCACAATCAAGGAGGAAAGTAAAGCCAGAGCAGTGCTTGGCTGGCAAG
 GCCCATAGCACCGGAGAGCAACCGCCGAGCTCAGCTTGGCCACCAGGGTAAAGCATGAA
 TCATCCTCCAGTGATGAGGAGCGCGCAGCTGCCAAGCCATCAAACGCAGGCCACCTCCCT
 CTTCTGCCTAATGTCAGCTACAAGAAGACTCCTCGGCTGACTTCCGAGCAGCTTAAAGC
 TTGAAGTTGAAGAATGGCCCAACGACGTGGTTTTTCAGTGTACCACGCAGTACCAAGGC
 ACGTGCCGCTGTGAGGGACCATCTATCTGTGGAAGTGGGATGATAAAGTCATCATTCT
 GATATTGATGGGACAATTACCAGATCAGATACTTGGCCACATTTTGGCCACCCTTGGG
 AAGGATTGGACCCATCAGGGCATCGCTAAGCTGTACCATAAAGTGAAGCCAGAATGGATAT
 AAATTTCTCTACTGTTCTGCCCGTGCCATCGGGATGGCGGACATGACGCGGGGCTACCTG
 CACTGGGTCAACGAGAGGGGCACGGTGTGCCCCAGGGGCCCTGCTGCTGAGTCCCAGC
 AGCCTCTTCTGCCCCTGCACAGAGAAGTGATTGAAAAGAAGCCAGAAAAGTTAAAGTC
 CAGTGTGGTACAGACATCAAAAACCTGTTTTTCCCAACACAGAACCTTTTATGCTGCT
 TTTGAAAACCGACAGCTGATGTATTATACAAGCAAGTAGGAGTGTCTTTGAATAGA
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 TCGTATGTGAGACTCTGTGAAGTAGTCGACCACGTTTTCCCGTTGCTGAAAAGAAGCCAT
 TCTTCAGACTTTCCCTGTTCCGATACCTTCAGTAACTTACCTTTTGGAGAGAGCCACTG
 CCACCTTTTAAAACCAGGACATTCATTCTGCCTCAGCGTAAAATGTCCCAAGCAGCCTC
 TTGCCAGCAGTGACAGAGCCTGGTGTGACCCATTAAAGGATAGGTCTCCCGGAGTGAC
 AGCTCCACCTGGGAGCCTGGCGCGTCATCATTGGCCTGACAGCAGAGAGAATTGAGAAGC
 ATTTCTCCCCTGCCACCCCGGGGCTGACATTTCTAAGCAAGATAGGAAGGGAGCACTT
 TCTAGGCTAGGAGTTGGGTGCATTTGTACCGTAAAAGCATTCTCAGTTGTGGCTTAAT
 GCCAGTTACGACGCTGCCTTTCCG

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_145693 unedited
 GTTTTTAAATTGTATACGACTCATATAGGCGGCCGNAATTCGCACGAGGCAGCCGGCG
 GCGGGCTGGGTGTTTGAATAACAAGGCGGCCACGCGCGGCCGCTCGGTGCAGACCAT
 GAATTACGTGGGCAGTTAGCCGCGCAGGTGTTTGTACCGTGAAGGAGCTCTACAAGGG
 GCTGAATCCCGCCACACTCTCAGGGTGCATTGACATCATTGTATCCGCCAGCCCAATGG
 AAACCTCCAATGCTCCCTTTCCACGTCCGCTTTGGGAAGATGGGGTCTGCGCTCCCG
 AGAGAAAGTGGTTGACATAGAAATCAATGGGGAATCTGTGGATTGATATGAAATTGGG
 AGATAATGGAGAAGCATTTTTGTCAAGAAACAGATAATGATCAGGAAGTTATCCCTAT
 GCACCTGGCCACCTCCCCATCTGTGAGAAGGAGCTTCGAGAATGGAATGCCAGCTGAA
 AAGGGCTCTGTGGACAGGATGAGAGGCCTGGACCCAGCAGCCAGCCCAAGTGATCGC
 TCCAGCGAGACCGCTCAAGCAGCTCTGTAGTAAAGAAGAGAAGAAAAAGGAGGAGAAA
 GTCACAGCTGGACAGCCTGAAGAGAGATGACAACATGAACACATCTGANGATGAGGACAT
 GTTCCCCATCGAGATGAGCTCGGATGAGGCCATGGAGCTGCTGGAGAGCAGCAGAACTCT
 TCCTATGATATACCTNCATTCCAGATGATTCCTGAGGAAAACCTCTCCCTGCTGTGAT
 TTACCCTCAGTCAGCCTCATACCCTAATTNCGATAGAGAGTGGTCACCCACTCCCAGTNC
 TTNCGNTTCCGACTTCNACACCTAAAGTGATTGAGAAATGTCAGCAGTCCACGAA

3' Read Nucleotide Sequence:	>OriGene 3' read for NM_145693 unedited TGGACCGCGCCGTTTTAGNANCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTGATT TGAGTCTTACTTTGTACCCAGGCTGGAGTGCAGTAGTGCAAGCTCGGCTCACTGCAACC TCAGGCAGGACTATTTTTAATTATTTTAAATACCTGCAAAGGGAATCTGCACATGCACA TCCGTGTTTCTACAGAAATCTGCGATCGATGGCAGATCTGTTGCCTTTGGGTGTCCACA TGAACCATTTGGCAAAGGCATCCAATGCTAACGGGGCCCACTACAACGGAGGCAAC AACTCTGTGGATTTTCTTTCACAGAAAGAGTAAAATTTCAATCAACCGTCCATTTTTTG CCTCCTGTGATTCTAACAAATGAAATTTAAATAGGAAAATGTTCAATCGTTGGAGTAAAA CACTTTTTAAAAAATAATGCTTCGAAAAGCAAAGCAAATCTTTTACAAAATAATTCT TTCACTTTTCAAATGCCCCTGTCCACGAGCCAGTGAATAAACAAGTGAAGAATCACAT TCTGTAGGCTTAAAGAATGCCAAATTACTTTTTTCGCTTGCCCTTAATTTGAGTGAA AAAGCTAAGGAACACACATGACTCATAAATTTCAAAGAATGCCAGTCTATGAGAAAGAC AGAATAAGGCCCTTCGATAGTCCAACACATACCTTTTTTAATATTAATGACAGCGG TATAAACGAATATGAATAAATGCTTATCCCCGTACCCTAATCCGAGAAAACATTTCTTA CTTTTTAATAATATAGTGACCTTTGAAATATTTTCTAAACCAACCTTCTTTGGAAA CCCCACAGAGGAGATCATTACATTTACATAAGGGCGCCAAGTCCACTGTGACACAC CTCCCTGAAGATAGAGATCGCCCGCCACATTTTCAAACCGCTTTACATATTCTATGCA CTTTACCTAAGCGTCGCA
Restriction Sites:	NotI-NotI
ACCN:	NM_145693
Insert Size:	4230 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none"> 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:	<u>NM_145693.1</u> , <u>NP_663731.1</u>
RefSeq Size:	5363 bp
RefSeq ORF:	2673 bp
Locus ID:	23175
UniProt ID:	<u>Q14693</u>
Cytogenetics:	2p25.1
Domains:	lipin_N

Gene Summary:

This gene encodes a magnesium-ion-dependent phosphatidic acid phosphohydrolase enzyme that catalyzes the penultimate step in triglyceride synthesis including the dephosphorylation of phosphatidic acid to yield diacylglycerol. Expression of this gene is required for adipocyte differentiation and it also functions as a nuclear transcriptional coactivator with some peroxisome proliferator-activated receptors to modulate expression of other genes involved in lipid metabolism. Mutations in this gene are associated with metabolic syndrome, type 2 diabetes, acute recurrent rhabdomyolysis, and autosomal recessive acute recurrent myoglobinuria (ARARM). This gene is also a candidate for several human lipodystrophy syndromes. [provided by RefSeq, Mar 2017]

Transcript Variant: This variant (1) represents the shortest transcript and encodes the shortest isoform (1; also known as alpha). Both variants 1 and 5 encode the same isoform (1).