

Product datasheet for **RC235233**

Liprin alpha 2 (PPFIA2) (NM_001220475) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Liprin alpha 2 (PPFIA2) (NM_001220475) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PPFIA2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC235233 representing NM_001220475 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGATGTGTGAAGTGATGCCACGATTAATGAGGACACCCCAATGAGCCAAAGGGGGTCCCAAAGCAGTG
GCTCGGACTCAGACTCCCATTTGAGCAGCTGATGGTGAATATGCTAGATGAAAGGGATCGTCTTCTAGA
CACCCCTTCGGGAGACCCAGGAAAGCCTCTCACTTGCCAGCAAAGACTTCAGGATGTCATCTATGACCGA
GACTCACTCCAGAGACAGCTCAATTCAGCCCTGCCACAGGATATCGAATCCCTAACAGGAGGGCTGGCTG
GTTCTAAGGGGGCTGATCCACCGGAATTTGCTGCACTGACAAAAGAATTAATGCCTGCAGGGAACAAC
TCTAGAAAAGGAAGAAGAAATCTCTGAACCTAAAGCTGAAAGAAACAACAAGACTATTACTGGAGCAT
TTGGAGTGCCTTGTGTCACGACATGAAAGATCACTAAGAATGACGGTGGTAAAACGGCAAGCCAGTCTC
CCTCAGGAGTATCCAGTGAAGTTGAAGTCTCAAGGCACTGAAATCTTTGTTTGGAGCACCACAAGCCCT
GGATGAAAAGGTAAAGGAGCGACTGAGGGTTTCTTTAGAAAGAGTCTCTGCACTGGAAGAAGAAGTCT
GCTGCTAATCAGGAGATTGTTGCCTTGCCTGAACAAAATGTTTCATATACAAAGAAAAATGGCATCAAGCG
AGGGATCCACAGAGTCAAGCATCTTGAAGGGATGGAACCTGGACAGAAAGTCCATGAGAAGCGTTTGT
CAATGGTTCTATAGACTCAACCGATGAAACTAGTCAAATAGTTGAACTACAAGAATTGCTTGAAAAGCAA
AACTATGAAATGGCCAGATGAAAGAACGTTTAGCAGCCCTTTCTCCCGAGTGGGAGAGGTGGAACAGG
AAGCAGAGACAGCAAGAAAGGATCTCATTAAAACAGAAGAAATGAACACCAAGTATCAAAGGGACATTAG
GGAGGCCATGGCAGAAAAGGAGATATGGAAGAAAGAAATACAACCCCTTGAAAAGCGTTACCTCAGTGCT
CAGAGAGAATCTACCTCCATACATGACATGAATGATAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAG
TCCTGCGGCAGATGGAAGAGAAAAACAGACAGTTACAAGAAGCTTTGAGCTAGCTGAACAAAAGTTGCA
GCAGACCATGAGAAAGGCTGAAACCTTGCTGAAGTAGAGGCTGAACTGGCTCAGAGAATTGCAGCCCTA
ACCAAGGCTGAAGAGAGACATGGAATATTGAAGAAGCTATGAGACATTTAGAGGGTCAACTTGAAGAGA
AGAAATCAAGAAGCTTCAAAGAGCTAGGCAAAGAGAGAAAAATGAATGAGGAGCATAACAAGGATTATCGGA
TACGGTTGATAGACTTCTGACTGAATCCAATGAACGCCTACAACACTAAAGGAAAAGATGGCTGCT
CTAGAAGAAAAGAAATGTTTTAATCAAGAATCAGAAAATTTAGAAAAGAAATCTTGAAGAATCTTTACATG
ATAAGGAAAGATTAGCAGAAGAAATGAAAAGCTGAGATCTGAACTTGACCAATTGAAAATGAGAAGTGG
CTCTTTAATTGAACCCACAATACCAAGAAGTCTCTAGACACCTCAGCTGAGTTGCGGTAAGTCAAGTGGGA



[View online »](#)

TCCCTAGTGGACAGCCAGTCTGATTACAGAACAATAAAGTAATAAGAAGACCAAGGAGAGGCCGCATGG
GTGTGCGAAGAGATGAGCCAAAGGTGAAATCTCTTGGGGATCACGAGTGGAAATAGAAGTCAACAGATTGG
AGTACTAAGCAGCCACCCCTTTTAAAGTGACACTGAAATGTCTGATATTGATGATGACAGAGAAACA
ATTTTTAGCTCAATGGATCTTCTCTCCAAGTGGTCATTCGGATGCCAGACGCTAGCCATGATGCTTC
AGGAACAATTGGATGCCATCAACAAAGAAATCAGGCTAATTCAGGAAGAAAAAGAATCTACAGAGTTGCG
TGCTGAAGAAATTGAAAAAGAGTGGCTAGTGTGAGCCTCGAAGGCTGAATTTGGCAAGGGTCCACCCA
GGTACCTCCATTACTGCCTCTGTTACAGCTTCATCGCTGGCCAGTTCATCTCCCCCAGTGGACACTCAA
CTCCAAAAGCTCACCCCTCGAAGCCCTGCCAGGGAAATGGATCGGATGGGAGTCATGACACTGCCAAGTGA
TCTGAGGAAACATCGGAGAAAGATTGCAGTTGTGGAAGAAGATGGTTCGAGAGGACAAAGCAACAATTA
TGTGAACTTCTCCTCCTACCCCTAGAGCCCTCAGAATGACTCACACTCTCCCTTCTCCTACCACA
ATGATGCTCGAAGTAGTTTATCTGTCTCTTGGCCAGAAAGCCTCGGGCTTGGTAGTCCAACAGCAG
CCAAGACTCTCTCACAAAGCCCCAAGAAGAAAGGAATCAAGTCTTCAATAGGACGTTTGTGGTAA
AAAGAAAAGCTCGACTTGGCAGCTCCGAGGCTTATGGAGACTGAAGCTGCAGCTCAGGAGTCCCTGG
GGTTAGGCAAACCGAACTCAAGCTGAGAAGGATCGAAGACTAAAGAAAAGCATGAATCTTGAAGA
AGCTCGGAGAAAGGATTACCTTTTGCCAGTGGGATGGGCAACTGTGGTCGCATGGCTAGAGCTTTGG
TTGGGAATGCCTGCGTGGTACGTGGCAGCCTGCCAGCCAACGTGAAGAGTGGTGCATCATGTCTGCTT
TATCTGACACTGAGATCCAGAGAGAAATTGGAATCAGCAATCCACTGCATCGCTTAAAACCTCGATTAGC
AATCCAGGAGATGGTTTTCCCTAACAAAGTCTTCAGCTCCTCCAACATCTCGAACTAAAGAATCTGAGGAA
GGAAGCTGGGCCAGTGTCCGGTTTTCTACAGACCCTGGCTTATGGAGATATGAATCATGAGTGGATTG
GAAATGAATGGCTTCCAGCTTGGGGTTACCTCAGTACAGAAGTACTTTATGGAATGCTTGGTAGATGC
AAGAATGTTAGATCACCTAACAAAAAAGATCTCCGTGCCATTTAAAAATGGTGGATAGTTCCATCGA
ACAAGTTTACAATATGGAATTATGTGCTTAAAGAGGTTGAATTATGACAGAAAAGAACTAGAAAGAAGAC
GGGAAGCAAGCCAACATGAAATAAAAGACGTGTTGGTGTGGAGCAATGACCGAGTTATTCGCTGGATACA
AGCAATTGGACTTCGAGAATATGCAAATAATACTTGAGAGCGGTGTGCATGGCTCACTTATAGCCCTG
GATGAAAACCTTGGACTACAGCAGCTTAGCTTTATTATTACAGATTCCAACACAGAACACCCAGGCAAGGC
AGATTCTTGAAGAGAATACAATAACCTCTTGGCCCTGGAACTGAAAGGCGACTGGATGAAAGTATGA
CAAGAACTTCAGACGTGGATCAACCTGGAGAAGGCAGTTTCTCCTCGTGAAGTACATGGAATCAGCATG
ATGCCTGGGTCTCAGAAACATTACCAGCTGGATTTAGGTTAACCACAACCTCTGGGCAGTCAAGAAAA
TGACAACAGATGTTGCTTCATCAAGACTGCAGAGGTTAGACAACCTCCACTGTTCCGCACATACTCATGT

ACCGGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

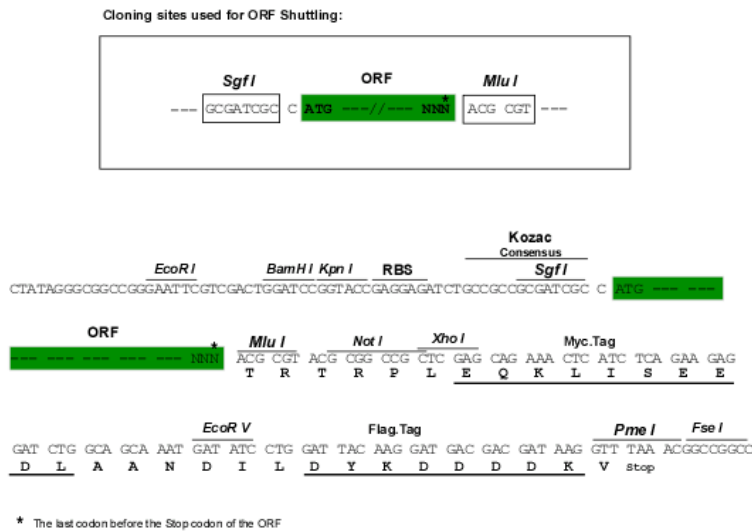
Protein Sequence: >RC235233 representing NM_001220475
 Red=Cloning site Green=Tags(s)

MMCEVMP TINEDTPMSQRGSQSSGSDSDSHFEQLMVNMLDERDRLLDTLRETQESLSLAQQRLQDVIYDR
 DSLQRQLNSALPQDIESLTGGLAGSKGADPPEFAALTKELNACREQLLEKEEIESELKAERNRLLLEH
 LECLVSRHERSLRMTVVKRQAQSPSGVSSEVEVLKALKSLFEHHKALDEKVRERLRSLESALEEELA
 AANQEIVALREQNVHIQRKMASSEGSTESEHLEGMPEGQKVHEKRLSNGSIDSTDETSQIVELQELLEKQ
 NYEMAQMKERLAALSSRVGEVEQEAETARKDLIKTEEMNTKYQRDIREAMAQKEDMEERITTLKRYLSA
 QRESTS IHDMNDKLENELANKEAILRQMEEKNRQLQERLELAEQKLQQTMRKAETLPEVEAELAQRIAAL
 TKAEERHGNI EERMRLHLEGQLEEKNQELQRARQREKMNEEHKRLSDTVDRLLTESNERLQLHLKERMAA
 LEEKNVL IQESETFRKNLEESLHDKERLAEIEKLRSELDQLKMRGSLIEPTIPRTHLDTSAELRYSVG
 SLVDSQSDYRTTKVIRRRPRGRMGVRRDEPKVKSLGDHEWNRTQQIGVLSHPFESDTEMSDIDDDDDRET
 IFSSMDLLSPSGHSDAQTAMMLQEQLDAINKEIRLIQEEKESTELRAEIEENRVASVSLGNLNRVHP
 GTSITASVTASSLASSPPSGHSTPKLTPRSPAREMDRMGVMTPSDLRKHRRKIAVVEEDGREDKATIK
 CETSPPTPRALRMTHTLPSSYHNDARSSLVSLPEPSLGLGSANSSQDSLHKAPKKKGIKSSIGRLFGK
 KEKARLGQLRGFMETEAQAQESLGLGKLTQAEDRRLKKKHELLEEARRKLQPFQWDGPTVVAWLELW
 LGMPAWYVAACRANVKSGAIMSALSDTEIQREIGISNPLHRLKRLAIQEMVSLTSPSAPTSRTKESEE
 GSWAQCPVFLQTLAYGDMNHEWIGNEWLP SLGLPQYRSYFMECLVDARMLDHLTKKDLRVHLKMDVDFHR
 TSLQYIGIMCKRLNDRKELERRREASQHEIKDVLVWSNDRVIRWIQAIGLREYANNILESGVHGSLIAL
 DENFDYSSLALLLQIPTQNTQARQILEREYNNLLALGTERRLDESDDKNFRRGSTWRRQFPREVHGISM
 MPGSSETLPAGFRLTTTSGSRKMTTDVASSRLQRLDNSTVRTYSC

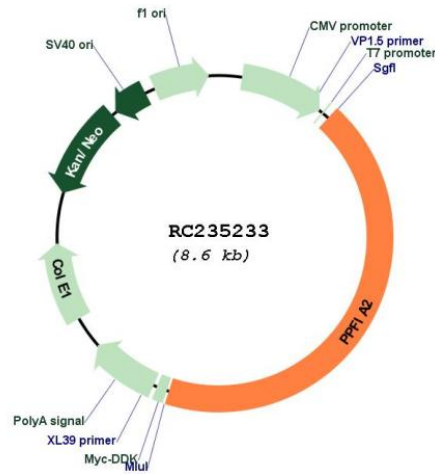
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001220475

ORF Size: 3708 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_001220475.2](#), [NP_001207404.1](#)

RefSeq Size: 5540 bp

RefSeq ORF: 3711 bp

Locus ID: 8499

UniProt ID: [O75334](#)

Cytogenetics: 12q21.31

Protein Families: Druggable Genome

MW: 141.5 kDa

Gene Summary: The protein encoded by this gene is a member of the LAR protein-tyrosine phosphatase-interacting protein (liprin) family. Liprins interact with members of LAR family of transmembrane protein tyrosine phosphatases, which are known to be important for axon guidance and mammary gland development. It has been proposed that liprins are multivalent proteins that form complex structures and act as scaffolds for the recruitment and anchoring of LAR family of tyrosine phosphatases. This protein has been shown to bind the calcium/calmodulin-dependent serine protein kinase (MAGUK family) protein (also known as CASK) and proposed to regulate higher-order brain functions in mammals. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2013]