

Product datasheet for **RC235196**

Liprin alpha 2 (PPFIA2) (NM_001220477) Human Tagged ORF Clone

Product data:

| | |
|--------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Liprin alpha 2 (PPFIA2) (NM_001220477) 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: | >RC235196 representing NM_001220477 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATTTTCTCGGATATGAACACCGTTTCTGGCTCCCCTAAAGTGCATCCTCCTAATGGGACCCGGTTTT
ACACTTTTCAAGAATTTGCTGCACTGACAAAAGAATTAATGCCTGCAGGGAACAATTCTAGAAAAGGA
AGAAGAAATCTCTGAACCTAAAGCTGAAAGAAACAACACAAGACTATTACTGGAGCATTTGGAGTGCCTT
GTGTCACGACATGAAAGATCACTAAGAATGACGGTGGTAAAACGGCAAGCCAGTCTCCCTCAGGAGTAT
CCAGTGAAGTTGAAGTTCTCAAGGCACTGAAATCTTTGTTTGGAGCACCACAAGGCCTTGGATGAAAAGGT
AAGGGAGCGACTGAGGGTTTCTTTAGAAAAGTCTCTGCACTGGAAGAAGAACTAGCTGCTGCTAATCAG
GAGATTGTTGCCTTGCCTGAACAAAATGTTTATACAAAAGAAAATGGCATCAAGCGAGGGATCCACAG
AGTCAGAACATCTTGAAGGATGGAACCTGGACAGAAAGTCCATGAGAAGCGTTTGTCCAATGGTCTAT
AGACTCAACCGATGAAACTAGTCAAATAGTTGAACTACAAGAATTGCTTGAAGCAAAAATGAAATG
GCCAGATGAAAGAACGTTTAGCAGCCCTTTCTCCCGAGTGGGAGAGGTGGAACAGGAAGCAGAGACAG
CAAGAAAGGATCTCATTAAAACAGAAGAAATGAACACCAAGTATCAAAGGACATTAGGGAGGCCATGGC
ACAAAAGGAAGATATGGAAGAAAGAATTACAACCTTGAAAAGCGTTACCTCAGTCTCAGAGAGAAATCT
ACCTCCATACATGACATGAATGATAAACTAGAAAATGAGTTAGCAATAAAGAAGCTATCCTGCGGCAGA
TGGAAGAGAAAAACAGACAGTTACAAGAAGCTTGTAGCTAGCTGAACAAAAGTTGCAGCAGACCATGAG
AAAGGCTGAAACCTTGCCTGAAGTAGAGGCTGAACTGGCTCAGAGAATTGCAGCCCTAACCAAGGCTGAA
GAGAGACATGGAATATTGAAGAAGCTATGAGACATTTAGAGGGTCAACTTGAAGAGAAGAAATCAAGAAC
TTCAAAGAGCTAGGCAAAGAGAGAAAAATGAATGAGGAGCATAACAAGAGATTATCGGATACGGTTGATAG
ACTTCTGACTGAATCCAATGAACGCCTACAACCTAAAGGAAAGAAATGGCTGCTCTAGAAGAAAAG
AATGTTTTAATCAAGAATCAGAACTTTCAGAAAGAATCTTGAAGAATCTTTACATGATAAGGAAAGAT
TAGCAGAAGAAATGAAAAGCTGAGATCTGAACTTGACCAATTGAAAATGAGAAGTGGCTCTTTAATTGA
ACCCACAATACCAAGAAGCTCATCTAGACACCTCAGCTGAGTTGCGGTACTCAGTGGGATCCCTAGTGGAC
AGCCAGTCTGATTACAGAACAATAAAGTAAATAAGAAGACCAAGGAGAGGCCGCATGGGTGTGCGAAGAG
ATGAGCCAAAGGTGAAATCTCTTGGGATCAGGAGTGAATAGAAGTCAACAGATTGGAGTACTAAGCAG
CCACCTTTTGAAGTGACTGAAATGTCTGATATTGATGATGACAGAGAAACAATTTTTAGTCTCA



[View online >](#)

ATGGATCTTCTCTCCAAGTGGTCATTCCGATGCCAGACGCTAGCCATGATGCTTCAGGAACAATTGG
 ATGCCATCAACAAAGAAATCAGGCTAATTCAGGAAGAAAAAGAATCTACAGAGTTGCGTGCAGAAAT
 TGAATAAGAGTGGCTAGTGTGAGCCTCGAAGGCTGAATTTGGCAAGGGTCCACCCAGGTACCTCCATT
 ACTGCCTCTGTTACAGCTTCATCGCTGGCCAGTTCATCTCCCCCAGTGGACACTCAACTCCAAAGCTCA
 CCCCTCGAAGCCCTGCCAGGAAATGGATCGGATGGGAGTCATGACACTGCCAAGTATCTGAGGAAACA
 TCGGAGAAAGATTGCAGTTGTGGAAGAAGATGGTCGAGAGGACAAAGCAACAATTAATGTGAAACTTCT
 CCTCCTCTACCCCTAGAGCCCTCAGAATGACTCACACTCTCCCTTCTTCTACCACAATGATGCTCGAA
 GTAGTTTATCTGTCTCTTTGAGCCAGAAAGCCTCGGGCTTGGTAGTGCCAACAGCAGCCAAAGACTCTCT
 TCACAAAGCCCCAAGAAGAAAGGAATCAAGTCTTCAATAGGACGTTTGGTAAAAAGAAAAAGCT
 CGACTTGGGCAGCTCCGAGGCTTTATGGAGACTGAAGCTGCAGCTCAGGAGTCCCTGGGGTTAGGCAAAAC
 TCGGAACCAAGCTGAGAAGGATCGAAGACTAAAGAAAAAGCATGAACTTCTGAAGAAGCTCGGAGAAA
 GGGATTACCTTTTCCCAGTGGGATGGGCAACTGTGGTCGCATGGCTAGAGCTTTGGTTGGGAATGCCT
 GCGTGGTACGTGGCAGCCTGCCGAGCCAACTGAAGAGTGGTCCATCATGTCTGCTTTATCTGACTG
 AGATCCAGAGAGAAATTGGAATCAGCAATCCACTGCATCGCTTAAACTTCGATTAGCAATCCAGGAGAT
 GGTTCCTCAACAAGTCTTTCAGCTCCTCAACATCTCGAACTAAAGAATCTGAGGAAGGAAGCTGGGCC
 CAGACCCTGGCTTATGGAGATATGAATCATGAGTGGATTGGAAATGAATGGCTTCCCAGCTTGGGGTTAC
 CTCAGTACAGAAGTTACTTTATGGAATGCTTGGTAGATGCAAGAATGTTAGATACCTAACAAAAAAGA
 TCTCCGTGTCCATTTAAAAATGGTGGATAGTTCCATCGAACAAGTTTACAATATGGAATTATGTGCTTA
 AAGAGGTTGAATTATGACAGAAAAGAACTAGAAAAGAACGCGGAAGCAAGCCAACATGAAATAAAAGACG
 TGTTGGTGTGGAGCAATGACCGAGTTATTCGCTGGATACAAGCAATTGGACTTCGAGAATATGCAATAA
 TATACTTGAGAGCGGTGTGCATGGCTCACTTATAGCCCTGGATGAAAACCTTGGACTACAGCAGCTTAGCT
 TTATTATTACAGATTCCAACACAGAACACCCAGGCAAGGCAGATTCTTGAAGAGAATACAATAACCTCT
 TGGCCCTGGAACTGAAAGGCGACTGGATGAAAGTGATGACAAGAAGTTCAGAGCTGGATCAACCTGGAG
 AAGGCAGTTTCTCCTCGTGAAGTACATGGAATCAGCATGATGCCTGGGTCTCAGAAACATTACCAGCT
 GGATTTAGGTTAACCCAACCTCTGGGAGTCAAGAAAAATGACAACAGATGTTGCTTCATCAAGACTGC
 AGAGGTTAGACAACCTCACTGTTGCGACATACTCATGT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC235196 representing NM_001220477
 Red=Cloning site Green=Tags(s)

MIFSDMNTVSGSPKVHPPNGTRFYTFQEF AALTKELNACREQLLEKEEEISELKAERNRLLLEHLECL
 VSRHERSLRMTVVKRQAQSPSGVSSEVEVLKALKSLFEHHKALDEKVRERLRVSLERVSALLEELAAANQ
 EIVALREQNVHIQRKMASSEGSTESEHLEGMPEGQKVHEKRLSNGSIDSTDETSQIVELQELLEKQNYEM
 AQMKERLAALSSRVGEVEQEAETARKDLIKTEEMNTKYQRDIREAMAQKEDMEERITTTLEKRYLSAQRES
 TSIHDMNDKLENELANKEAILRQMEENRQLQERLELAEQKLQQTMRKAETLPEVEAELAQRIAALTKAE
 ERHGNIEERMRLHEGLQLEEKQELQRARQREKMNEEHNKRLSDTVDRLLTESNERLQLHLKERMAALEEK
 NVLIQSESETFRKNLEESLHDKERLAEEIEKLRSEL DQLKMRTGSLIEPTIPRTHLDTSAELRYSVGLVD
 SQSDYRRTTKVIRRRRGRMGVRRDEPKVSLGDHEWNRTQQIGVLSHPFESDTEMSDIDDDRETIFSS
 MDLLSPSGHSDAQTAMMLQEQLDAINKEIRLIQEEKESTELRAEEIENRVASVSLEGLNLARVHPGTSI
 TASVTASSLASSPPSGHSTPKLTPRSPAREMDRMGMVMTLPSDLRKHRRKIAVVEEDGREDKATIKCETS
 PPPTPRALRMTHTLPSSYHNDARSSLVSLPEPESLGLGSANSSQDSLHKAPKKKGIKSSIGRLF GKKEKA
 RLGQLRGFMETEAAAQESLGLGKLTQAEKDRRLKKKHLEEEARRKGLPFAQWDGPTVVAWLELWLGMP
 AWYVAACRANVKSGAIMSALSDTEIQREIGISNPLHRLKRLAIQEMVSLTSPSAPPTSRTKSESEEGSWA
 QTLAYGDMNHEWIGNEWLP SLGLPQYRSYFMECLVDARMLDHLTKKDLRVHLKMVDSFHRTSLQYGMCL
 KRLNYDRKELERRREASQHEIKDVLVWSNDRVIRWIQAIGLREYANNILESGVHGSIALDENFDYSSLA
 LLLQIPTQNTQARQILEREYNNLLALGTERRLDESDDKNFRRGSTWRRQFPPREVHGISMMPGSSETLPA
 GFRLTTTSGSRKMTTDVASSRLQRLDNSTVRYTSC

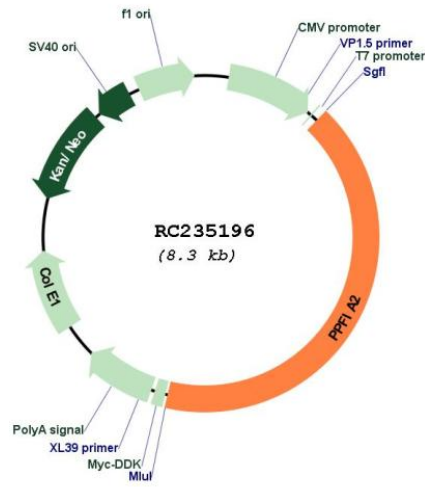
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001220477

ORF Size: 3468 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: | <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_001220477.2, NP_001207406.1</u> |
| RefSeq Size: | 5529 bp |
| RefSeq ORF: | 3471 bp |
| Locus ID: | 8499 |
| UniProt ID: | <u>O75334</u> |
| Cytogenetics: | 12q21.31 |
| Protein Families: | Druggable Genome |
| MW: | 132.6 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] |