

Product datasheet for MC224828

Phlpp1 (NM_133821) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Phlpp1 (NM_133821) Mouse Untagged Clone
Tag: Tag Free
Symbol: Phlpp1
Synonyms: AI836256; mKIAA0606; Phlpp; Plekhe1; SCOP
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC224828 representing NM_133821
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGCCCGCCGCTGCAGCCCCGGCACAGCGACTCGCGGACCCACGGGTGAGGACCAAGCCCTGGCGG
 CGGCGGGCGGCGAGGGCGGCCGTGTCCGATCCCGCTGAGCGCGGGCCCGGAGCGCGGGAAACGG
 CGGCGCGGCGGAGAGGAGGCCCTGCGAGGCGCGCGGGGCGCTGCCGGCCGCGCGGAGGACCC
 GGGCGCAGGGCGGCGGGGAGCTCCCCAGCCCGCGCCGGTGGGGCCGCTCCGGTGCCTCGCGCCGGCG
 GCGGCGCAACTCGCTGCTGCTGAAGAGAGGGCGGCTGAAGAGGAATCTGTCCGGCCGCGCGCCGCCCTC
 GTCGCTCTCGTCGCCGCTCCTCGGCGTCTTCCGGCCGCTGGCGGCCTCCCGCGTCTGCTCGGCTCGGGC
 TCGCTGTGCACCCGGAGCCTGGACAGGAAGACGCTGCTCCTGAAGCACCAGGACGCTTTCAGCTGCAGC
 CGTCGGACAGGGACTGGGTGAGGCACAGCTCCAGCGGGGCTGTGTGCACGTCTTTGACCGCCACATGGC
 CTCGTCTACCTGCGCCAGTGTCTGCACGCTGGACACCACGGCCCGGAGGTGGCGGCCCGGCTCTG
 CAGCTGGGCCACAAAGGGCGGGGTGGTGAAGGTGCTGGGCTACGGGCCGCTCCCGCCCGCCCGCTG
 CGCCAGCGATCAGACCCTGGACGGAGAGCACGGAAGGAGCTGGAGCCACCGCCCTCGAGCGGCACTGT
 TGGTGTGTCCGGGCCCTGCGCGCGCGCTCCCGCCGATCTGCCGCTGCCCGGGGGCGCCTGGACGCGC
 TGTGCACCCCGCATCAGCCCCGCGCCTTCGACTCCAGCCCCGGAGAGCTGTTCCGGGGCGGCCCGGGT
 CCCCTCCCGCGCCCCGCGCCCGGCTCTGACACCGAGAGCTTACGCTGAGCCCCAGCGCGGAGAGCGT
 GTCAGACCGGCTGGACCCTACAGCAGCGGGCGGGCGGCTCCTCGTCTGTCGAGGAGTTAGAGGCT
 GATCCGGCATGCCCCACCGCCCCGCGCCCGCGCAGCCTCGGCCGCTTCCCGAAGACCTCGGCTT
 TACTGCAGCCGAAAGCCCCGACGGGCTAGACAGCACTGGCGTGATAGCGGGGAGGGTCCCGGAGACGA
 TAAGCGATGGCAGCCGAGCTCCGACGTTCTCTGTCGACTTCGGGGAGGATACGGGAGACCGTGCAA
 AAGACATCTCCGCCCTCCCTGTATGTACAGCTCCATGGAGAGACTACCGGCCCTGGAGGCGGACGAGA
 AGCATTGCAGATCCAAAATGACTACCTTCCAAGTGGGATTTGGGGAGCTGTGGAGGGTGCAGGAGGA
 AGGCATGGACTCAGAGATTGGCTGTCTATTGATTCTATGCAGGAAAGCCTCATAGCACTGGGAGCTCT
 GAGCGATTACGCTCTCCGGAATGTACAATGTCCGAAAAGGCAAAATGCAGTTGCCAGTGAACCGATGGA



[View online >](#)

CAAGACGACAGGTCATTCTGTGCGGGACGTGCTTGATAGTGTGCTCCGTGAAAGACAGCGTGAGTGGGAA
 GATGCATGTCCTGCCCTCATTGGTGGAAAAGTGGAGGAAGTAAAAAGCACCAGCACTGTTTAGCGTTC
 AGCTCTTCGGGGCCTCAAAGCCAGACTTACTACATCTGCTTTGATACTTTACGGAGTACTTACGGTGGC
 TGCGGCAAGTCTCCAAGTTGCATCACAGCGTATAAGCTCAGTAGACCTCCTGTTGTAGCCTTGAACA
 TCTGCCTGCCAACCTCTTTACAGCCAAGACCTTACTCATCTCACTTAAAACAGAACTTCTAAGGCAA
 ACCCCCACCCTCCAGCTGCCAGAGGACTTGGTGAAGTGCAGAGTTCCACCAATTGAAGAGCCTTAACC
 TTTCCAATAACCCACTAGGAGCCTTCCGTCAGCAGTGCAGCATTCCAACCCTAGCAGAGCTGAATGT
 ATCTTGCAATGCCCTGCGAGAAGTCCCAGCAGCTGTTGGAGATATGCAGAAGTTCAGAGCCTTCTGCTG
 GATGGAAATTTTCTCCAGTCCCTTCTGCTGAACTGGAGAGCATGCACCAGCTCAGCTATCTGGGTCTTT
 CCTTTAATGAATTCAGTACATTCCAGAGGTATTGGAGAAGCTGACTGCTGTGGATAAGCTGTGTATGGC
 TGGGAAGTGTGTGGAGACCCTCAGACTACAGGCCCTAAGAAGAATGCCTCATATTAACATGTGGACCTA
 AGACTGAACATACTCAGAAAAGCTTATGGCAGATGAGGTGGACTTTGTGCAACATGCTACTCAGCTTGACC
 TGCGAGACAATAAGCTTGGTGATCTAGATGCTATGATCTTCAACAACATAGAAGTCTGCAGCTGTGAGAG
 GAATCAGCTGGTACATTGAACGTTTGTGGCTATTTCTAAAGGCACTCTATGCTTCTTCTAATGAAGT
 GCTCAACTTGATGCTACCCAGTCCGAATTATCTCTTACATGGATGTCTCAAGAACTGCCTAGAAA
 GTGTGCCCTGAGTGGGTATGTGAAAGCCGAAAATTAGAAGTTTTGGATATTGGCCATAATCAAATATGTGA
 ACTTCTGCCCGCTGTTTTGTAATAGTAGTCTCCGAAAATTGCTAGCAGGACACAACCGGTTGGCAAGG
 CTTCTGAAAGGCTGGAGAGAAGTCTGTGGAGGTCTGGATGTCAGCACAACCAGATCACTGAGCTCC
 CACCAACCTCCTCATGAAGGCTGACAGCCTGAGATTCTGAAATGCATCTGCAAAACAACTGGAAACCTT
 GCCTCCAGCCACACTTTCTGAGGAGACGAGCAGTATATTACAGGAGTGTACCTGACAAACAACTGCCTC
 ACGGATAAGTGTGTGCCCTTGTAAACAGGGCACCCCGTCTGAAGATCTACACATGGCCTATAACCGGC
 TTCAGAGCTTCCCGCAAGTAAAATGGCAAACTGGAGGAAGTGAAGAAATGATATCAGTGGGAATAA
 GCTGAAAGCCATCCCCACAACAATCATGAACTGCAGACGATGCACACCCTGATTGCTCACTCCAATTGT
 ATCGAAGTCTTTCTGAAGTTATGCAGCTCCCAGAAGTCAAGTGTGTAGATCTGAGCTGTAATGAGCTGA
 GTGAAATCACGTTACCAGAAAACCTGCCACCTAAGCTGCAGGAGCTAGACCTGACTGGAATCCACGCTT
 TGCCCTGGACCACAAAAGCCTGGAGCTGCTCAATAACATTGCTGCTTCAAGATTGACCAGCCGTGACGA
 GGAGATGCATCAGGAGCCCAGCAGTATGGAGTCAATGTTACTGAAGCATCGGGAGTAAAAACAAGC
 TGTGTGTCGACGCCCTGTCTGTAATAACTTCCGTGACAACCGAGAGGCCCTCTATGGTGTGTTGATGG
 AGACCGGAATGTGGAGGTGCCCTACCTTCTCCAGTGCACCATGAGTGACATTTTGGCTGAAGAGCTTCAG
 AAAACGAAAAATGAAGAAGAATACATGGTCAATACATTATAGTATGCAAGGAAACTGGGAAGTCTG
 GGCAGAACTTGGTGGTGTGCTGCTGCTGCCACATCAAGCCTGACCCTGTGGACTGGGAGGATCCTT
 TACCCTGACCTCTGCTAATGTTGGCAAGTGCCAAACGGTCTCTGTGCAATGGGAGGCCACTGTCTCTG
 TCCAGGTCATACATCATGAGCTGTGAAGAAGAGCGGAAGAGGATTAAGCAGCACAAGCCATCATCACTG
 AGGATGGCAAGGTCAATGGAGTGACAGAGTCCACGCGCATCCTGGGCTACACCTTCTCCATCCCAGTGT
 GGTGCCTCGCCCCATGTGCAGTCGGTCTTCTGACTCCACAGGATGAGTTTTTCATCCTGGGCAGCAAA
 GGGCTGTGGGACAGCCTATCCATTGACGAGGCTGTGGAAGCTGTACGCAATGTGCCAGATGCTCTGGCTG
 CTGCTAAGAAGCTCTGCACCCTGGCTCAGAGCTATGGCTGCCATGACAGCATCAGTGTGTGGTGGTACA
 GCTAAGTGTACCGAAGACAGCTTCTGCTGTGTGAGCTCAGTGTGGAGGGAGCATGCCACCACCAGC
 CCCGAAATCTTCCACCATCCGTCAACATGGTCAATCAAGGACCGACCCTCAGATGGGCTGGGTGTGCCAT
 CCTCCAGCAGTGGCATGGCATCTGAGATCAGCAGTGAAGTGTCTACCTCCGAGATGAGTGTGAGGTGGG
 CTCCACAGCCTCTGATGAGCCCCGCTGGAGTCTGAATGAGAGCAGCCCTGCCTACCCCAACGAGCAG
 CGCTGCATGCTCCACCCTGTCTGCTGTCTAACTCCTTCCAACGTGAGTGTCCAGCGCTACTTTCTCCA
 GCGCGTTCTGTGACAACGGCCTTGACAGTGACGATGAAGAACCATTGAGGGGGTGTTCAGCAACGGCAG
 CCGGGTTGAGGTGGAAGTAGACATCCACTGCAGCAGGGCCAAGGAAAAGGAGAGACAGCAGCAGCCTACTT
 CAGGTGCCAGCTGAGGCCAGTGTGAGGGCATTGTCATCAGTGCATGAGGATGAGTCAAGTCTGTCCA
 AGAAGGCAGACTTTTCTGCTGTGGGAACCATTGGACGACGAGGGCTAATGGCTCTGTAGCTCCCCAGGA
 AAGGAGCCATAATGTGATAGAGGTTGCTGCAGATGCGCCTCTCCGGAAGCCAGGAGGCTATTTTGCAGCC
 CCTGCTCAGCCAGATCCAGATGATCAGTTATCATCCCCCAGAGCTGGAAGAGGAAGTCAAAGAAATCA
 TGAAACATCACAGGAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGC
 GCCACAGCCACAGCCACAGCCACAGCCACAGCCACAGCCACAGCCACAGCCGCGCACTTCCAATGGATCACCTGCCA
 GACTGTTACGATACACCGCTA**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-Mlul
ACCN:	NM_133821
Insert Size:	5064 bp
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.
	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
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:	NM_133821.3 , NP_598582.3
RefSeq Size:	6123 bp
RefSeq ORF:	5064 bp
Locus ID:	98432
UniProt ID:	Q8CHE4
Cytogenetics:	1 E2.1

Gene Summary:

Protein phosphatase involved in regulation of Akt and PKC signaling. Mediates dephosphorylation in the C-terminal domain hydrophobic motif of members of the AGC Ser/Thr protein kinase family; specifically acts on 'Ser-473' of AKT2 and AKT3, 'Ser-660' of PRKCB and 'Ser-657' of PRKCA (By similarity). Isoform 2 seems to have a major role in regulating Akt signaling in hippocampal neurons (By similarity). Akt regulates the balance between cell survival and apoptosis through a cascade that primarily alters the function of transcription factors that regulate pro- and antiapoptotic genes. Dephosphorylation of 'Ser-473' of Akt triggers apoptosis and suppression of tumor growth. Dephosphorylation of PRKCA and PRKCB leads to their destabilization and degradation. Dephosphorylates STK4 on 'Thr-387' leading to STK4 activation and apoptosis. Dephosphorylates RPS6KB1 and is involved in regulation of cap-dependent translation. Inhibits cancer cell proliferation and may act as a tumor suppressor. Dephosphorylates RAF1 inhibiting its kinase activity. May act as a negative regulator of K-Ras signaling in membrane rafts (By similarity). Involved in the hippocampus-dependent long-term memory formation (PubMed:17382888). Involved in circadian control by regulating the consolidation of circadian periodicity after resetting (PubMed:20080691). Involved in development and function of regulatory T-cells (PubMed:21498666). [UniProtKB/Swiss-Prot Function]