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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
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>MC224828 representing NM_133821
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCCCGCCGCTGCAGCCCCGGCACAGCGACTCGCGGACCCCACGGGTGAGGACCAAGCCCTGGCGG
CGGCGGCGGCCGAGGGCGGCCGGTGTCCGGATCCCGCGCTGAGCGCGGCGGCCCCGAGCGGCGGGAACGG
CGGCGCGGCGCGAGAGGAGGCCCCCTGCGAGGCGCCGCCGGGGCCGCTGCCCGGCCGCGCCGGAGGCACC
GGGCGCAGGCGGCGGCGGGGAGCTCCCCAGCCCGCGGCCGGTGGGGCCGCTCCGGTGCCCGCGGCCGGCG
GCGGCGCCAACTCGCTGCTGCTGAAGAGAGGGCGGCTGAAGAGGAATCTGTCGGCCGCCGCCGCCGCCTC
GTCGTCCTCGTCGCCGTCCTCGGCGTCTTCGGCCGCTGGCGGCCTCCCGGCGTCCTGCTCGGCCTCGGCG
TCGCTGTGCACCCGGAGCCTGGACAGGAAGACGCTGCTCCTGAAGCACCGGCAGCTGCTTCAGCTGCAGC
CGTCGGACAGGGACTGGGTGAGGCACCAGCTCCAGCGGGGCTGTGTGCACGTCTTTGACCGCCACATGGC
CTCGTCCTACCTGCGCCCAGTGCTCTGCACGCTGGACACCACGGCCGCCGAGGTGGCGGCCCGGCTTCTG
CAGCTGGGCCACAAAGGCGGCGGGGTGGTGAAGGTGCTGGGCTACGGGCCGCCTCCCGCCGCCGCCCCTG
CCGCCAGCGATCAGACCCTGGACGGAGAGCACGGAAGGGACGTGGAGCCACCGCCCTCGAGCGGCACTGT
TGGTGCTGTCCGGGGCCCTGCGCGCGCGCCTCCCGCCGATCTGCCGCTGCCCGGGGGCGCCTGGACGCGC
TGTGCACCCCGCATCAGCCCCGCGCCTTCGGACTCCAGCCCCGGAGAGCTGTTCGCGGGCGGCCCCGGGT
CCCCTCCCCGCGCCCCGCGCCCGGCCTCTGACACCGAGAGCTTCAGCCTGAGCCCCAGCGCCGAGAGCGT
GTCAGACCGGCTGGACCCCTACAGCAGCGGCGGCGGCGGCTCCTCGTCGTCGTCGGAGGAGTTAGAGGCT
GATCCGGCCATGCCCCACCGCCCCGGCCGCCCCGCGCAGCCTCGGCCGCCTTCCCCGAAGACCTCGGCTT
TACTGCAGCCGAAAGCCCCGACGGGCGTAGACAGCACTGGCGTGATAGCGGGCGAGGGTCCCGGAGACGA
TAAGGCGATGGCAGCCGCAGCTCCGGACGTTCCTCTGTCGACTTCGGGGAGGATACGGGAGACCGTGCAA
AAGACATCTCCGCCCTCCCTGTATGTACAGCTCCATGGAGAGACTACCCGGCGCCTGGAGGCGGACGAGA
AGCCATTGCAGATCCAAAATGACTACCTCTTCCAACTGGGATTTGGGGAGCTGTGGAGGGTGCAGGAGGA
AGGCATGGACTCAGAGATTGGCTGTCTCATTCGATTCTATGCAGGAAAGCCTCATAGCACTGGGAGCTCT

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GAGCGGATTCAGCTCTCCGGAATGTACAATGTCCGAAAAGGCAAAATGCAGTTGCCAGTGAACCGATGGA
CAAGACGACAGGTCATTCTGTGCGGGACGTGCTTGATAGTGTCGTCCGTGAAAGACAGCGTGAGTGGGAA
GATGCATGTCCTGCCCCTCATTGGTGGAAAAGTGGAGGAAGTGAAAAAGCACCAGCACTGTTTAGCGTTC
AGCTCTTCGGGGCCTCAAAGCCAGACTTACTACATCTGCTTTGATACTTTCACGGAGTACTTACGGTGGC
TGCGGCAAGTCTCCAAGGTTGCATCACAGCGTATAAGCTCAGTAGACCTCTCCTGTTGTAGCCTTGAACA
TCTGCCTGCCAACCTCTTTTACAGCCAAGACCTTACTCATCTCAACTTAAAACAGAACTTCCTAAGGCAA
ACCCCCACCCTCCCAGCTGCCAGAGGACTTGGTGAACTGCAAAGGTTCACCAAATTGAAGAGCCTTAACC
TTTCCAATAACCACCTAGGAGCCTTTCCGTCAGCAGTCTGCAGCATTCCAACCCTAGCAGAGCTGAATGT
ATCTTGCAATGCCCTGCGAGAAGTCCCAGCAGCTGTTGGAGATATGCAGAACTTGCAGACGTTTCTGCTG
GATGGAAATTTTCTCCAGTCCCTTCCTGCTGAACTGGAGAGCATGCACCAGCTCAGCTATCTGGGTCTTT
CCTTTAATGAATTCACTGACATTCCAGAGGTATTGGAGAAGCTGACTGCTGTGGATAAGCTGTGTATGGC
TGGGAACTGTGTGGAGACCCTCAGACTACAGGCCTTAAGAAGAATGCCTCATATTAAACATGTGGACCTA
AGACTGAACATACTCAGAAAGCTTATGGCAGATGAGGTGGACTTTGTGCAACATGTCACTCAGCTTGACC
TGCGAGACAATAAGCTTGGTGATCTAGATGCTATGATCTTCAACAACATAGAAGTTCTGCACTGTGAGAG
GAATCAGCTGGTGACATTGAACGTTTGTGGCTATTTCCTAAAGGCACTCTATGCTTCTTCTAATGAACTT
GCTCAACTTGATGTCTACCCAGTTCCGAATTATCTCTCTTACATGGATGTCTCAAGAAACTGCCTAGAAA
GTGTGCCTGAGTGGGTATGTGAAAGCCGGAAATTAGAAGTTTTGGATATTGGCCATAATCAAATATGTGA
ACTTCCTGCCCGCCTGTTTTGTAATAGTAGTCTCCGGAAATTGCTAGCAGGACACAACCGGTTGGCAAGG
CTTCCTGAAAGGCTGGAGAGAACTTCTGTGGAGGTCTTGGATGTCCAGCACAACCAGATCACTGAGCTCC
CACCAAACCTCCTCATGAAGGCTGACAGCCTGAGATTCCTGAATGCATCTGCAAACAAACTGGAAACCCT
GCCTCCAGCCACACTTTCTGAGGAGACGAGCAGTATATTACAGGAGTTGTACCTGACAAACAACTGCCTC
ACGGATAAGTGTGTGCCCTTGTTAACAGGGCACCCCCGTCTGAAGATCCTACACATGGCCTATAACCGGC
TTCAGAGCTTCCCGGCAAGTAAAATGGCAAAACTGGAGGAACTTGAAGAAATTGATATCAGTGGGAATAA
GCTGAAAGCCATCCCCACAACAATCATGAACTGCAGACGCATGCACACCGTGATTGCTCACTCCAATTGT
ATCGAAGTCTTTCCTGAAGTTATGCAGCTCCCAGAAGTCAAGTGTGTAGATCTGAGCTGTAATGAGCTGA
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TGCCCTGGACCACAAAAGCCTGGAGCTGCTCAATAACATTCGCTGCTTCAAGATTGACCAGCCGTCAGCA
GGAGATGCATCAGGAGCCCCAGCAGTATGGAGTCATGGTTACACTGAAGCATCGGGAGTAAAAAACAAGC
TGTGTGTCGCAGCCCTGTCTGTAAATAACTTCCGTGACAACCGAGAGGCCCTCTATGGTGTGTTTGATGG
AGACCGGAATGTGGAGGTGCCCTACCTTCTCCAGTGCACCATGAGTGACATTTTGGCTGAAGAGCTTCAG
AAAACGAAAAATGAAGAAGAATACATGGTCAATACATTCATAGTCATGCAAAGGAAACTGGGAACTGCTG
GGCAGAAACTTGGTGGTGCTGCTGTCCTCTGCCACATCAAGCCTGACCCTGTGGACCTGGGAGGATCCTT
TACCCTGACCTCTGCTAATGTTGGCAAGTGCCAAACGGTTCTCTGTCGAAATGGGAAGCCACTGTCTCTG
TCCAGGTCATACATCATGAGCTGTGAAGAAGAGCGGAAGAGGATTAAGCAGCACAAAGCCATCATCACTG
AGGATGGCAAGGTCAATGGAGTGACAGAGTCCACGCGCATCCTGGGCTACACCTTCCTCCATCCCAGTGT
GGTGCCTCGCCCCCATGTGCAGTCGGTGCTTCTGACTCCACAGGATGAGTTTTTCATCCTGGGCAGCAAA
GGGCTGTGGGACAGCCTATCCATTGACGAGGCTGTGGAAGCTGTACGCAATGTGCCAGATGCTCTGGCTG
CTGCTAAGAAGCTCTGCACCCTGGCTCAGAGCTATGGCTGCCATGACAGCATCAGTGCTGTGGTGGTACA
GCTAAGTGTCACCGAAGACAGCTTCTGCTGCTGTGAGCTCAGTGCTGGAGGGAGCATGCCACCACCCAGC
CCCGGAATCTTCCCACCATCCGTCAACATGGTCATCAAGGACCGACCCTCAGATGGGCTGGGTGTGCCAT
CCTCCAGCAGTGGCATGGCATCTGAGATCAGCAGTGAACTGTCTACCTCCGAGATGAGTAGTGAGGTGGG
CTCCACAGCCTCTGATGAGCCCCCGTCTGGAGTCCTGAATGAGAGCAGCCCTGCCTACCCCAACGAGCAG
CGCTGCATGCTCCACCCTGTCTGCCTGTCTAACTCCTTCCAACGTCAGCTGTCCAGCGCTACTTTCTCCA
GCGCGTTCTCTGACAACGGCCTTGACAGTGACGATGAAGAACCCATTGAGGGGGTGTTCAGCAACGGCAG
CCGGGTTGAGGTGGAAGTAGACATCCACTGCAGCAGGGCCAAGGAAAAGGAGAGACAGCAGCACCTACTT
CAGGTGCCAGCTGAGGCCAGTGATGAGGGCATTGTCATCAGTGCCAATGAGGATGAGTCAGGTCTGTCCA
AGAAGGCAGACTTTTCTGCTGTGGGAACCATTGGACGACGCAGGGCTAATGGCTCTGTAGCTCCCCAGGA
AAGGAGCCATAATGTGATAGAGGTTGCTGCAGATGCGCCTCTCCGGAAGCCAGGAGGCTATTTTGCAGCC
CCTGCTCAGCCAGATCCAGATGATCAGTTTATCATCCCCCCAGAGCTGGAAGAGGAAGTCAAAGAAATCA
TGAAACATCACCAGGAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCTGCCACCACCACCCCAGCCGCCACA
GCCACAGCCACAGCCACAGCCACAGCCACAGCCACAGCCACAGCGGCACTTCCAAATGGATCACCTGCCA
GACTGTTACGATACACCGCTATGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	SgfI-MluI
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:	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]