

Product datasheet for MC223110

Phlpp (BC059254) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Phlpp (BC059254) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Phlpp
Synonyms:	SCOP, mKIAA0606
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>BC059254 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCAGTTGCCAGTGAACCGATGGACAAGACGACAGGTCATTCTGTGCGGGACGTGCTTGATAGTGTGCT
CCGTGAAAGACAGCGTGAGTGGGAAGATGCATGTCCTGCCCTCATTGGTGGAAAAGTGGAGGAAGTGAA
AAAGCACCAGCACTGTTTAGCGTTCAGCTCTTCGGGGCCCAAAGCCAGACTTACTACATCTGCTTTGAT
ACTTTCACGGAGTACTTACGGTGGCTGCGCAAGTCTCCAAGGTTGCATCACAGCGTATAAGCTCAGTAG
ACCTCTCCTGTTGTAGCCTTGAACATCTGCCTGCCAACCTCTTTTACAGCCAAGACCTTACTCATCTCAA
CTTAAACAGAACTTCTAAGGCAAACCCACCTCCAGCTGCCAGAGGACTTGGTGAAGTCAAAGG
TTCACCAAATTGAAGAGCCTTAACCTTTCCAATAACCACCTAGGAGCCTTCCGTCAGCAGTCTGCAGCA
TTCCAACCCTAGCAGAGCTGAATGTATCTTGAATGCCCTGCGAGAAGTCCCAGCAGCTGTTGGAGATAT
GCAGAACTTGACAGCCTTCTGCTGGATGGAAATTTCTCCAGTCCCTCCTGCTGAAGTGGAGAGCATG
CACCAGCTCAGCTATCTGGGTCTTTCTTAATGAATCACTGACATCCAGAGGTATTGGAGAAGCTGA
CTGCTGTGGATAAGCTGTGTATGGCTGGAACTGTGTGGAGACCCTCAGACTACAGGCCTTAAGAAGAAT
GCCTCATATTAACATGTGGACCTAAGACTGAACATACTCAGAAAAGCTTATGGCAGATGAGGTGGACTTT
GTGCAACATGTCACTCAGCTTGCCTGCGAGACAATAAGCTTGGTGTATAGATGCTATGATCTTCAACA
ACATAGAAGTTCTGCACTGTGAGAGGAATCAGCTGGTGCATTGAACGTTTGTGGCTATTTCTAAAGGC
ACTCTATGCTTCTTAATGAACCTTGTCAACTTGTCTACCTACCCAGTCCGAATTATCTCTTTACATG
GATGTCTCAAGAACTGCCTAGAAAAGTGTGCTGAGTGGGTATGTGAAAGCCGAAATTAGAAGTTTGG
ATATTGGCATAATCAAATATGTGAACCTCCTGCCCGCTGTTTGTAAATAGTAGTCTCCGAAATTGCT
AGCAGGACACAACCGTTGGCAAGGCTTCTGAAAGCTGGAGAGAACTTCTGTGGAGGTCTGGATGTC
CAGCACAACCAGATCACTGAGCTCCACCAAACCTCCTCATGAAGGCTGACAGCCTGAGATTCTGAATG
CATCTGCAAACTGAAACCTGCCTCCAGCCACACTTTCTGAGGAGACGAGCAGTATATTACAGGA
GTTGTACCTGACAACTGCCTCAGGATAAGTGTGTGCCCTTGTAAACAGGGCACCCCGTCTGAAG
ATCCTACACATGGCCTATAACCGGCTTCAGAGCTTCCCGCAAGTAAAATGGCAAACCTGGAGGAAGTGG



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AAGAAATTGATATCAGTGGGAAT AAGCTGAAAGCCATCCCCACAACAATCATGAACTGCAGACGCATGCA
 CACCGTGATTGCTCACTCCAATTGTATCGAAGTCTTTCCTGAAGTTATGCAGCTCCCAGAAGTCAAGTGT
 GTAGATCTGAGCTGTAATGAGCTGAGTGAATCACGTTACCAGAAAACCTGCCACCTAAGCTGCAGGAGC
 TAGACCTGACTGGAAATCCACGCCTTGCCTGGACCACAAAAGCCTGGAGCTGCTCAATAACATTCGCTG
 CTTCAAGATTGACCAGCCGT CAGCAGGAGATGCATCAGGAGCCCCAGCAGTATGGAGTCATGGTTACACT
 GAAGCATCGGGAGTAAAAACAAGCTGTGTGTCGACGCCCTGTCTGTAATAACTCCGTGACAACCGAG
 AGGCCCTCTATGGTGTGTTTGATGGAGACCGGAATGTGGAGGTGCCCTACCTTCTCCAGTGCACCATGAG
 TGACATTTTGGCTGAAGAGCTTCAGAAAACGAAAATGAAGAAGAATACATGGTCAATACATTCATAGTC
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 ACCCTGTGGACCTGGGAGGATCCTTTACCCTGACCTCTGCTAATGTTGGCAAGTGCCAAACGGTTCTCTG
 TCGAAATGGGAAGCCACTGTCTCTGTCCAGGTCATACATCATGAGCTGTGAAGAAGAGCGGAAGAGGATT
 AAGCAGCACAAGCCATCATCACTGAGGATGGCAAGGTCAATGGAGTGACAGAGTCCACGCGCATCTGG
 GCTACACCTTCTCCATCCCAGTGTGGTGCCTCGCCCCATGTGCAGTCGGTGTCTTACTCCACAGGA
 TGAGTTTTTTCATCTGGCAGCAAAGGGCTGTGGGACAGCCTATCCATTGACGAGGCTGTGAAGCTGTA
 CGCAATGTGCCAGATGCTCTGGCTGCTGTAAGAAGCTCTGCACCCTGGCTCAGAGCTATGGCTGCCATG
 ACAGCATCAGTGTGTGGTGGTACAGCTAAGTGTACCGAAGACAGCTTCTGCTGTGTGAGCTCAGTGC
 TGGAGGGAGCATGCCACCACCCAGCCCCGAATCTTCCCACCATCCGTCAACATGGTCATCAAGGACCGA
 CCCTCAGATGGGCTGGGTGTGCCATCCTCCAGCAGTGGCATGGCATCTGAGATCAGCAGTGAAGTGTCTA
 CCTCCGAGATGAGTAGTGAGGTGGGCTCCACAGCCTCTGATGAGCCCCGTCTGGAGTCTGAATGAGAG
 CAGCCCTGCCTACCCCAACGAGCAGCGCTGCATGTCTCCACCCTGTCTGCCTGTCTAACTCCTTCCAACT
 CAGCTGTCCAGCGCTACTTTCTCCAGCGGTTCTCTGACAACGGCCTTGACAGTGACGATGAAGAACCCA
 TTGAGGGGGTGTTCAGCAACGGCAGCCGGTTGAGGTGGAAGTAGACATCCACTGCAGCAGGGCCAAGGA
 AAAGGAGAGACAGCAGCACCTACTTCAGGTGCCAGCTGAGGCCAGTGTGAGGGCATTGTCATCAGTGCC
 AATGAGGATGAGTCAGGTCTGTCCAAGAAGGCAGACTTTTCTGCTGTGGGAACCATTGGAGCAGCAGGG
 CTAATGGCTCTGTAGCTCCCCAGGAAAGGAGCCATAATGTGATAGAGTTGCTGCAGATGCGCCTCTCCG
 GAAGCCAGGAGGCTATTTTGCAGCCCCTGCTCAGCCAGATCCAGATGATCAGTTTATCATCCCCCAGAG
 CTGGAAGAGGAAGTCAAAGAAATCATGAAACATCACCAGGAGCAGCAGCAGCAGCAGCAGCAGCAGCAGC
 TGCCACCACCACCCAGCCGCCACAGCCACAGCCACAGCCACAGCCACAGCCACAGCCACAGCCACAGCG
 GCACTTCAAATGGATCACCTGCCAGACTGTTACGATACACCGCTATGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** BC059254
- Insert Size:** 3549 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:

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: [BC059254](#), [AAH59254](#)

RefSeq Size: 4783 bp

RefSeq ORF: 3548 bp

Locus ID: 98432

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]