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

Fully Sequenced ORF:

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>BC059254
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCAGTTGCCAGTGAACCGATGGACAAGACGACAGGTCATTCTGTGCGGGACGTGCTTGATAGTGTCGT
CCGTGAAAGACAGCGTGAGTGGGAAGATGCATGTCCTGCCCCTCATTGGTGGAAAAGTGGAGGAAGTGAA
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ACTTTCACGGAGTACTTACGGTGGCTGCGGCAAGTCTCCAAGGTTGCATCACAGCGTATAAGCTCAGTAG
ACCTCTCCTGTTGTAGCCTTGAACATCTGCCTGCCAACCTCTTTTACAGCCAAGACCTTACTCATCTCAA
CTTAAAACAGAACTTCCTAAGGCAAACCCCCACCCTCCCAGCTGCCAGAGGACTTGGTGAACTGCAAAGG
TTCACCAAATTGAAGAGCCTTAACCTTTCCAATAACCACCTAGGAGCCTTTCCGTCAGCAGTCTGCAGCA
TTCCAACCCTAGCAGAGCTGAATGTATCTTGCAATGCCCTGCGAGAAGTCCCAGCAGCTGTTGGAGATAT
GCAGAACTTGCAGACGTTTCTGCTGGATGGAAATTTTCTCCAGTCCCTTCCTGCTGAACTGGAGAGCATG
CACCAGCTCAGCTATCTGGGTCTTTTCTTTAATGAATTCACTGACATTCCAGAGGTATTGGAGAAGCTGA
CTGCTGTGGATAAGCTGTGTATGGCTGGGAACTGTGTGGAGACCCTCAGACTACAGGCCTTAAGAAGAAT
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AGCAGGACACAACCGGTTGGCAAGGCTTCCTGAAAGGCTGGAGAGAACTTCTGTGGAGGTCTTGGATGTC
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GTTGTACCTGACAAACAACTGCCTCACGGATAAGTGTGTGCCCTTGTTAACAGGGCACCCCCGTCTGAAG
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ATCCTACACATGGCCTATAACCGGCTTCAGAGCTTCCCGGCAAGTAAAATGGCAAAACTGGAGGAACTTG
AAGAAATTGATATCAGTGGGAATAAGCTGAAAGCCATCCCCACAACAATCATGAACTGCAGACGCATGCA
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CTGGAAGAGGAAGTCAAAGAAATCATGAAACATCACCAGGAGCAGCAGCAGCAGCAGCAGCAGCAGCAGC
TGCCACCACCACCCCAGCCGCCACAGCCACAGCCACAGCCACAGCCACAGCCACAGCCACAGCCACAGCG
GCACTTCCAAATGGATCACCTGCCAGACTGTTACGATACACCGCTATGA

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).

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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]

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