

## Product datasheet for MR211767L3V

## OriGene Technologies, Inc.

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## Phlpp (BC059254) Mouse Tagged ORF Clone Lentiviral Particle

## **Product data:**

**Product Type:** Lentiviral Particles

**Product Name:** Phlpp (BC059254) Mouse Tagged ORF Clone Lentiviral Particle

Symbol:

SCOP, mKIAA0606 Synonyms:

**Mammalian Cell** 

Selection:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Tag: Myc-DDK ACCN: BC059254 **ORF Size:** 3546 bp

**ORF Nucleotide** 

OTI Disclaimer:

Sequence:

The ORF insert of this clone is exactly the same as(MR211767).

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.

RefSeq: BC059254.1 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]