

Product datasheet for RC212846L3V

OriGene Technologies, Inc.

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PHLPP2 (NM_015020) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: PHLPP2 (NM_015020) Human Tagged ORF Clone Lentiviral Particle

Symbol: PHLPP2

Synonyms: PHLPPL; PPM3B

Mammalian Cell

Selection:

Puromycin

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

 Tag:
 Myc-DDK

 ACCN:
 NM_015020

 ORF Size:
 3969 bp

ORF Nucleotide

OTI Disclaimer:

Sequence:

The ORF insert of this clone is exactly the same as(RC212846).

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.

RefSeg: NM 015020.2, NP 055835.2

 RefSeq Size:
 8317 bp

 RefSeq ORF:
 3972 bp

 Locus ID:
 23035

 UniProt ID:
 Q6ZVD8

 Cytogenetics:
 16q22.2

 MW:
 146.7 kDa







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 AKT1, 'Ser-660' of PRKCB isoform beta-II and 'Ser-657' of PRKCA. 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 decreases cell proliferation. Also controls the phosphorylation of AKT3. Dephosphorylates STK4 on 'Thr-387' leading to STK4 activation and apoptosis (PubMed:20513427). Dephosphorylates RPS6KB1 and is involved in regulation of capdependent translation (PubMed:21986499). Inhibits cancer cell proliferation and may act as a tumor suppressor. Dephosphorylates RAF1 inhibiting its kinase activity (PubMed:24530606). [UniProtKB/Swiss-Prot Function]