

Product datasheet for PH312846

PHLPP2 (NM_015020) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	PHLPP2 MS Standard C13 and N15-labeled recombinant protein (NP_055835)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC212846
Predicted MW:	146.7 kDa
Protein Sequence:	>RC212846 protein sequence Red=Cloning site Green=Tags(s)

MKRNGSRNCLNRRSRFGSRERDWLREDVKRGCYVLYGADTTTATTTTTSSSSSSSSSSDHLHLVLCCTVE
TPASEICAGEGRESLYLQLHGDLVRRLEPTERPLQIVYDYL SRLGFDDPVRIQEEATNPDLGCMIRFYGE
KPCCHMDRLDRILLSGIYVNRKGGKQLHKWAERLVVLCGTCLIVSSVKDCQTGKMHILPLVGGKIEEVKRR
QYSLAFSSAGAQAQTYHVSFETLAEYQRWQRQASKVVSQRISTVDLSCYSLEEVEPEHLFSQDITYLNLNLR
HNFMQLERPGGLDTLYKFSQLKGLNL SHNKLGLFPILLCEISTL TELNLSCNGFHDLP SQIGNLLNLQTL
CLDGNFLTTLPEELGNLQQLSSLGISFNNFSQIPEVYEKLTMLDRVVMAGNCLEVLNLGVLNRMNHKIKHV
DLRMNHLKTMVIENLEGNKHITHVDLRDNRLTDLDLSSLCSLEQLHCGRNQLRELTL SGFSLRRTL YASSN
RLTAVNVYPVPSLLTFLDL SRNLEECVPDWACEAKKIEVL DVSYNLL TEVPVRILSSLRKLMLGHNHV
QNLPTLVEHIPEVLDLQHNALTRLPTDLF SKALNLRYLNASANSLESLSACTGEEESL SMLQLLYLTNN
LLTDQCIPVLVGHHLRLHLANNQLQTFPASKLNKLEQLEELNL SGNLKIPTTIANCKRLHTLVAHS
NNISIFPEILQLPQIQFVDSLSCNDL TEILPEALPATLQDLDTGNTNLVLEHKTL DIFSHITTLKIDQK
PLPTTDDSTVTSTFWSHGLAEMAGQRNKL CVSALAMDSFAEGVGAVYGMFDGRNEELPRLLQCTMADVLL
EEVQQSTNDTVFMANTFLVSHRKLGMAGQKLGSSALLCYIRPDTADPASSFSLTVANVTGCAVLCRGGK
PVPLSKVFSLEQDPEEAQRVKDQKAIITEDNKVNGVTCCTRMLGCTYL YPWILPKPHISSPTLTIQDELL
ILGNKALWEHLSYTEAVNAVRHVQDPLAAAKKLC TLAQSYGCQDNVGMVVYLNIGEEGCTCEMNGLTLP
GPVGFASSTTTIKDAPKATPSSSSGIASEFSSEMSTSEVSSEVGSTASDEHNAGGLD TALLPRPERRCSL
HPTPTSGLFQRQPSSATFSSNQSDNGLDSDDDQPV EGVITNGSKVEVEVDIHCCRGRDLENSPPLIESSP
TLCSEEHARGSCFGIRRQNSVNSGMLL PMSKDRMELQKSPSTSCLY GKKLSNGSIVPLEDSLNLIEVATE
VPKRKTGYFAAPTQMEPEDQFVVP HDLEEEVKEQMKQH QDSRLEPEPHEEDQTEPPEEFDAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

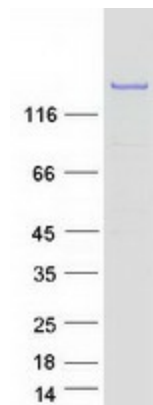
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method



[View online »](#)

Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_055835
RefSeq Size:	8317
RefSeq ORF:	3969
Synonyms:	PHLPPL; PPM3B
Locus ID:	23035
UniProt ID:	Q6ZVD8
Cytogenetics:	16q22.2
Summary:	<p>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 cap-dependent translation (PubMed:21986499). Inhibits cancer cell proliferation and may act as a tumor suppressor. Dephosphorylation of PRKCA and PRKCB leads to their destabilization and degradation. Dephosphorylates RAF1 inhibiting its kinase activity (PubMed:24530606).[UniProtKB/Swiss-Prot Function]</p>

Product images:



Coomassie blue staining of purified PHLPP2 protein (Cat# [TP312846]). The protein was produced from HEK293T cells transfected with PHLPP2 cDNA clone (Cat# [RC212846]) using MegaTran 2.0 (Cat# [TT210002]).