

## Product datasheet for TP312846

### PHLPP2 (NM\_015020) Human Recombinant Protein

#### Product data:

|                                       |  |
|---------------------------------------|--|
| Product Type:                         | Recombinant Proteins   |
| Description:                          | Recombinant protein of human PH domain and leucine rich repeat protein phosphatase-like (PHLPP), 20 µg |
| Species:                              | Human  |
| Expression Host:                      | HEK293T  |
| Expression cDNA Clone or AA Sequence: | >RC212846 protein sequence<br>Red=Cloning site Green=Tags(s)   |

MKRNGSRNCLNRRSRFGSRERDWLREDVKRGCVYLYGADTTTATTTTTSSSSSSSSSSDLHLVLCVETPASEICAGEGRESLYLQLHGDLVRRLEPTERPLQIVYDYLSRLGFDDPVRIQEEATNPDLGCMIRFYGKPCMDRLDRILLSGIYNVRKGTQLHKWAERLVVLCGTCLIVSSVKDCQTGKMHILPLVGGKIEEVKRRQYSLAFSSAGAQAQTYHVSFETLAEQYRWRQASKVVSQRISTVDLSCYSLEEVPEHLFYSQDITYLNLRHNFMQLERPGGLDTLYKFSQLKGLNLSHNKLGFPILLCEISTLTELNLSNCFHDLPSQIGNLLNLQTLCLDGNFLTTPPEELGNLQQLSSLGISFNFSQIPEVVEKLTMLDRVVMAGNCEVLNLGVLNRMNHIKHVDLRMNHLKTMVIENLEGNKHITHVDLRDNRDLTDLSSLCSLEQLHCGRNQLRELTLSGFSRLTYASSNRLTAVNVYPVPSLLTFLDLSRNLLCVPDWACEAKKIEVLDVSYNLLTEVPVRISSLSLRKMLGHNHVQNLPTLVEHIPLEVLDLQHNLTRLPDTLFSKALNRLYNASANSLESLSACTGEESLSMLQLLYLTNNLLTDQCIPVLVGHHLRILHLANNQLQTFPASKLNKLEQLEELNLSGNKLTPIPTIANCKRLHTLVVAHSNNISIFPEILQLPQIQFVDLSCNDLTEILPEALPATLQDLDLTGNTNLVLEHKTLDIFSHITLTKIDQKPLPTTDSTVTSTFWSHGLAEMAGQRNKLCSALAMDSFAEYGVAVYGMFDGDRNEELPRLLQCTMADVLL EEVQQSTNDTVFMANTFLVSHRKLGMAGQKLGSSALLCYIRPDTADPASSFSLTVANVTGCAVLCRGGKPVPLSKVFSLEQDPEEAQRVKDQKAIITEDNKVNGVTCCTRMLGCTYLYPWILPKPHISSTPLTIQDELLILGNKALWEHLSYTEAVNAVVRHVQDPLAAAKKCTLAQSYGCQDNVGMVYLNIGEEGCTCEMNGLTLP GPVGFASSTTIKDAPKPATPSSSSGIASEFSSEMSTSEVSEVSTASDEHNAGGLDTALLPRPERRCSLHPTPTSGLFQRQPSSATFSSNQSDNGLDSDDDQPVVEGVITNGSKVEVEVDIHCGRDRLENSPPLIESSPTLCSEEHARGSCFGIRRNQSVNSGMMLPMSKDRMELQKSPSTSCLYGKKLSNGSIVPLEDSLNLIEVATEVPKRKTGYFAAPTQMEPEDQFVVPDLEEEVKEQMKQHQSRLPEPEHEEDQTEPPEEFDAL

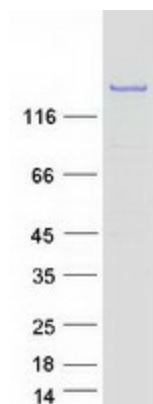
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

|               |           |
|---------------|-----------|
| Tag:          | C-Myc/DDK |
| Predicted MW: | 146.6 kDa |



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|                       |   |
|-----------------------|---|
| <b>Concentration:</b> | >0.05 µg/µL as determined by microplate BCA method  |
| <b>Purity:</b>        | > 80% as determined by SDS-PAGE and Coomassie blue staining   |
| <b>Buffer:</b>        | 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol  |
| <b>Preparation:</b>   | Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.  |
| <b>Note:</b>          | For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.  |
| <b>Storage:</b>       | Store at -80°C.   |
| <b>Stability:</b>     | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.   |
| <b>RefSeq:</b>        | <a href="#">NP_055835</a>   |
| <b>Locus ID:</b>      | 23035   |
| <b>UniProt ID:</b>    | <a href="#">Q6ZVD8</a>  |
| <b>RefSeq Size:</b>   | 8317  |
| <b>Cytogenetics:</b>  | 16q22.2   |
| <b>RefSeq ORF:</b>    | 3969  |
| <b>Synonyms:</b>      | PHLPPL; PPM3B   |
| <b>Summary:</b>       | <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]).