

Datasheet for ABIN3136302

**PHLPP2 Protein (AA 1-1320) (His tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	1 mg
Target:	PHLPP2
Protein Characteristics:	AA 1-1320
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PHLPP2 protein is labelled with His tag.
Application:	Western Blotting (WB), ELISA, Crystallization (Crys), SDS-PAGE (SDS)

## Product Details

Sequence:	MKHNGSRTCL NRRSRFGSRE RDWLREDVKR GCVLYGADT TTATTTTSSS SSSSSSSDLH LVLCTVETPA SEICAGEGRE SLYLQLHGDL VRRLEPSERP LQIVDYLSR LGFEDPVRIQ EEATNPDLS C MIRFYGEKPC QMDHLDRILL SGIYNVRKGK TQLHKWAERL VVLCGTCLIV SSVKDCQTGK MHILPLVGGK IEEVKRRQHS LAFSSAGAQA QTYHVSFETL AEYQRWQRQA SKVVSQRMST VDLSCYSLEE VPEHLFYSQD ITYLNLRHNF MQLERPGGLD TLHKFSQLKG LNLSHNKLGL FVLLCEIST LTELSCSNG FHDLP SQIGK LLNLQTLSLD GNGLTALPDE LGNLRQLTSL GISFNDFRHI PEVLEKLTML DKVAMAGNRL EVNLGALTR MSQVKHVDLR MNH LKTVITE NMEGNKHITH MDLRDNQLTD LDLSSLC SLE QLHCERNQLR ELTSLSGFSLR TLYASWNRLT AVNVYPVPSL LTSLELSQNL LECVPDWACE AKKLEILDIS HNLLTEVPMR ILSSLSLRKL MVGHNHIVL PALVEHIPLE VLDIQHNTLS RLPDTLFSKA LNLRYLNASA NSLES LPSAC AGEESLSVLQ LLYLT SNLLT DQCIPVLVGH PHLRVLHLAN NQLQTFPASK LNKLEQLEEL NLSGNKLTAI PTTIANCKRL HTLVAHANNI SIFPEILQLP QIQFVDLSCN DLTEILPEA
-----------	---

LPATLQDLDL TGNTNLVLEH KTLDMFSHIT ALKIDQKPLP ATDSAVTSTF WSHGLAEMAG  
QRNKL CVSAL AMDNFAEGVG AVYGMFDGDR NEELPRLLQC TMADV LLEEV QHSTNDTVFM  
TNTFLVSHRK LGMAGQKLGS SALLCYIRPD TADPTSSFSL TVANVGM CQA VLCRGGKPVP  
LSKVFSLEHD PEEAQRVKDQ KAIITEDNKV NGVTCCTRL GCTYLYPWIL PKPHIASTPL  
TIQDELLILG NKALWEHLSY LEAVNAVRHV QDPLAAAKKL CTLAQSYGCQ DNVGAMVVYL  
NIGEEGCTCE MNGLTLP GPV GFASTAALKD TPKPTTPSSS SGIASEFSSE MSTSEVSSEV  
GSTASDEHNT VGLEASLLPR PERRCSLHPA SSAGVFQRQP SCATFSSNQS DNGLDSDDDQ  
PVEGVITNGS RVEVEVDIHC CRGREPESSP PLPKNSSNAC SEERARGAGF GIRRQNSVNS  
GILLPANRDK MELQKSPSTS CLYGKKLSNG SIVPLEDSL N LIEVATEAPK RKTGYFAAPT  
QLEPEDQFVV PRDLEEEVKE QMKQH QEGRP EPEPRGEERT EPLEEFD TAL

**Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

---

### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Phlpp2 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

---

### Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three

## Product Details

- different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

## Target Details

Target:	PHLPP2
Alternative Name:	Phlpp2 ( <a href="#">PHLPP2 Products</a> )
Background:	<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. Dephosphorylates RPS6KB1 and is involved in regulation of cap-dependent translation. 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 (By similarity). {ECO:0000250 UniProtKB:Q6ZVD8}.</p>
Molecular Weight:	146.9 kDa Including tag.
UniProt:	<a href="#">Q8BXA7</a>
Pathways:	<a href="#">PI3K-Akt Signaling</a> , <a href="#">Fc-epsilon Receptor Signaling Pathway</a>

## Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee
--------------------	--

## Application Details

	though.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

## Images



**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process