Datasheet for ABIN3094545

PHLPP2 Protein (AA 1-1323) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	PHLPP2
Protein Characteristics:	AA 1-1323
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PHLPP2 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MKRNGSRNCL NRRSRFGSRE RDWLREDVKR GCVYLYGADT TTATTTTTTS SSSSSSSSSS DLHLVLCTVE TPASEICAGE GRESLYLQLH GDLVRRLEPT ERPLQIVYDY LSRLGFDDPV RIQEEATNPD LGCMIRFYGE KPCHMDRLDR ILLSGIYNVR KGKTQLHKWA ERLVVLCGTC LIVSSVKDCQ TGKMHILPLV GGKIEEVKRR QYSLAFSSAG AQAQTYHVSF ETLAEYQRWQ RQASKVVSQR ISTVDLSCYS LEEVPEHLFY SQDITYLNLR HNFMQLERPG GLDTLYKFSQ LKGLNLSHNK LGLFPILLCE ISTLTELNLS CNGFHDLPSQ IGNLLNLQTL CLDGNFLTTL PEELGNLQQL SSLGISFNNF SQIPEVYEKL TMLDRVVMAG NCLEVLNLGV LNRMNHIKHV DLRMNHLKTM VIENLEGNKH ITHVDLRDNR LTDLDLSSLC SLEQLHCGRN QLRELTLSGF SLRTLYASSN RLTAVNVYPV PSLLTFLDLS RNLLECVPDW ACEAKKIEVL DVSYNLLTEV PVRILSSLSL RKLMLGHNHV QNLPTLVEHI PLEVLDLQHN ALTRLPDTLF SKALNLRYLN ASANSLESLP SACTGEESLS MLQLLYLTNN LLTDQCIPVL VGHLHLRILH LANNQLQTFP

ASKLNKLEQL EELNLSGNKL KTIPTTIANC KRLHTLVAHS NNISIFPEIL QLPQIQFVDL SCNDLTEILI PEALPATLQD LDLTGNTNLV LEHKTLDIFS HITTLKIDQK PLPTTDSTVT STFWSHGLAE MAGQRNKLCV SALAMDSFAE GVGAVYGMFD GDRNEELPRL LQCTMADVLL EEVQQSTNDT VFMANTFLVS HRKLGMAGQK LGSSALLCYI RPDTADPASS FSLTVANVGT CQAVLCRGGK PVPLSKVFSL EQDPEEAQRV KDQKAIITED NKVNGVTCCT RMLGCTYLYP WILPKPHISS TPLTIQDELL ILGNKALWEH LSYTEAVNAV RHVQDPLAAA KKLCTLAQSY GCQDNVGAMV VYLNIGEEGC TCEMNGLTLP GPVGFASTTT IKDAPKPATP SSSSGIASEF SSEMSTSEVS SEVGSTASDE HNAGGLDTAL LPRPERRCSL HPTPTSGLFQ RQPSSATFSS NQSDNGLDSD DDQPVEGVIT NGSKVEVEVD IHCCRGRDLE NSPPLIESSP TLCSEEHARG SCFGIRRQNS VNSGMLLPMS KDRMELQKSP STSCLYGKKL SNGSIVPLED SLNLIEVATE VPKRKTGYFA APTQMEPEDQ FVVPHDLEEE VKEQMKQHQD SRLEPEPHEE DRTEPPEEFD TAL

Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.

Characteristics:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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 try to ensure that you receive soluble 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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system -

Product Details

	all that's needed is the DNA that codes for the desired protein! Concentration: • The concentration of our recombinant proteins is measured using the absorbance at 280nm. • The protein's absorbance will be measured against its specific reference buffer. • We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	PHLPP2
Alternative Name:	PHLPP2 (PHLPP2 Products)
Background:	PH domain leucine-rich repeat-containing protein phosphatase 2 (EC 3.1.3.16) (PH domain leucine-rich repeat-containing protein phosphatase-like) (PHLPP-like),FUNCTION: 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). {ECO:0000269|PubMed:17386267, ECO:0000269|PubMed:18162466, ECO:0000269|PubMed:19079341, ECO:0000269|PubMed:20513427, ECO:0000269|PubMed:21986499, ECO:0000269|PubMed:24530606}.
Molecular Weight:	146.8 kDa

Target Details

UniProt:	Q6ZVD8
Pathways:	PI3K-Akt Signaling, Fc-epsilon Receptor Signaling Pathway

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 though.
Comment:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications. During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months