Datasheet for ABIN3095453

INPPL1 Protein (AA 1-1258) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	INPPL1
Protein Characteristics:	AA 1-1258
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This INPPL1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MASACGAPGP GGALGSQAPS WYHRDLSRAA AEELLARAGR DGSFLVRDSE SVAGAFALCV LYQKHVHTYR ILPDGEDFLA VQTSQGVPVR RFQTLGELIG LYAQPNQGLV CALLLPVEGE REPDPPDDRD ASDGEDEKPP LPPRSGSTSI SAPTGPSSPL PAPETPTAPA AESAPNGLST VSHDYLKGSY GLDLEAVRGG ASHLPHLTRT LATSCRRLHS EVDKVLSGLE ILSKVFDQQS SPMVTRLLQQ QNLPQTGEQE LESLVLKLSV LKDFLSGIQK KALKALQDMS STAPPAPQPS TRKAKTIPVQ AFEVKLDVTL GDLTKIGKSQ KFTLSVDVEG GRLVLLRRQR DSQEDWTTFT HDRIRQLIKS QRVQNKLGVV FEKEKDRTQR KDFIFVSARK REAFCQLLQL MKNKHSKQDE PDMISVFIGT WNMGSVPPPK NVTSWFTSKG LGKTLDEVTV TIPHDIYVFG TQENSVGDRE WLDLLRGGLK ELTDLDYRPI AMQSLWNIKV AVLVKPEHEN RISHVSTSSV KTGIANTLGN KGAVGVSFMF NGTSFGFVNC HLTSGNEKTA RRNQNYLDIL RLLSLGDRQL NAFDISLRFT HLFWFGDLNY RLDMDIQEIL NYISRKEFEP LLRVDQLNLE REKHKVFLRF SEEEISFPPT

YRYERGSRDT YAWHKQKPTG VRTNVPSWCD RILWKSYPET HIICNSYGCT DDIVTSDHSP VFGTFEVGVT SQFISKKGLS KTSDQAYIEF ESIEAIVKTA SRTKFFIEFY STCLEEYKKS FENDAQSSDN INFLKVQWSS RQLPTLKPIL ADIEYLQDQH LLLTVKSMDG YESYGECVVA LKSMIGSTAQ QFLTFLSHRG EETGNIRGSM KVRVPTERLG TRERLYEWIS IDKDEAGAKS KAPSVSRGSQ EPRSGSRKPA FTEASCPLSR LFEEPEKPPP TGRPPAPPRA APREEPLTPR LKPEGAPEPE GVAAPPPKNS FNNPAYYVLE GVPHQLLPPE PPSPARAPVP SATKNKVAIT VPAPQLGHHR HPRVGEGSSS DEESGGTLPP PDFPPPPLPD SAIFLPPSLD PLPGPVVRGR GGAEARGPPP PKAHPRPPLP PGPSPASTFL GEVASGDDRS CSVLQMAKTL SEVDYAPAGP ARSALLPGPL ELQPPRGLPS DYGRPLSFPP PRIRESIQED LAEEAPCLQG GRASGLGEAG MSAWLRAIGL ERYEEGLVHN GWDDLEFLSD ITEEDLEEAG VQDPAHKRLL LDTLQLSK

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 - all that's needed is the DNA that codes for the desired protein!

Product Details

	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:	INPPL1
Alternative Name:	INPPL1 (INPPL1 Products)
Background:	Phosphatidylinositol 3,4,5-trisphosphate 5-phosphatase 2 (EC 3.1.3.86) (Inositol polyphosphate phosphatase-like protein 1) (INPPL-1) (Protein 51C) (SH2 domain-containing inositol 5'-phosphatase 2) (SH2 domain-containing inositol phosphatase 2) (SHIP-2),FUNCTION: Phosphatidylinositol (PtdIns) phosphatase that specifically hydrolyzes the 5-phosphate of phosphatidylinositol-3,4,5-trisphosphate (PtdIns(3,4,5)P3) to produce PtdIns(3,4)P2, thereby negatively regulating the PI3K (phosphoinositide 3-kinase) pathways (PubMed:16824732). Required for correct mitotic spindle orientation and therefore progression of mitosis (By similarity). Plays a central role in regulation of PI3K-dependent insulin signaling, although the precise molecular mechanisms and signaling pathways remain unclear (PubMed:9660833). While overexpression reduces both insulin-stimulated MAP kinase and Akt activation, its absence does not affect insulin signaling or GLUT4 trafficking (By similarity). Confers resistance to dietary obesity (By similarity). May act by regulating AKT2, but not AKT1, phosphorylation at the plasma membrane (By similarity). Part of a signaling pathway that regulates actin cytoskeleton remodeling (PubMed:11739414, PubMed:12676785). Required for the maintenance and dynamic remodeling of actin structures as well as in endocytosis, having a major impact on ligand-induced EGFR internalization and degradation (PubMed:15668240). Participates in regulation of cortical and submembraneous actin by hydrolyzing PtdIns(3,4,5)P3 thereby regulating membrane ruffling (PubMed:21624956). Regulates cell adhesion and cell spreading (PubMed:12235291). Required for HGF-mediated lamellipodium formation, cell scattering and spreading (PubMed:15735664). Acts as a negative regulator of EPHA2 receptor

Target Details

	endocytosis by inhibiting via PI3K-dependent Rac1 activation (PubMed:17135240). Acts as a regulator of neuritogenesis by regulating PtdIns(3,4,5)P3 level and is required to form an initial protrusive pattern, and later, maintain proper neurite outgrowth (By similarity). Acts as a negative regulator of the FC-gamma-RIIA receptor (FCGR2A) (PubMed:12690104). Mediates signaling from the FC-gamma-RIIB receptor (FCGR2B), playing a central role in terminating signal transduction from activating immune/hematopoietic cell receptor systems (PubMed:11016922). Involved in EGF signaling pathway (PubMed:11349134). Upon stimulation by EGF, it is recruited by EGFR and dephosphorylates PtdIns(3,4,5)P3 (PubMed:11349134). Plays a negative role in regulating the PI3K-PKB pathway, possibly by inhibiting PKB activity (PubMed:11349134). Down-regulates Fc-gamma-R-mediated phagocytosis in macrophages independently of INPP5D/SHIP1 (By similarity). In macrophages, down-regulates NF-kappa-B-dependent gene transcription by regulating macrophage colony-stimulating factor (M-CSF)-induced signaling (By similarity). Plays a role in the localization of AURKA and NEDD9/HEF1 to the basolateral membrane at interphase in polarized cysts, thereby mediates cell cycle homeostasis, cell polarization and cilia assembly (By similarity). Additionally promotion of cilia growth is also facilitated by hydrolysis of (PtdIns(3,4,5)P3) to PtdIns(3,4)P2 (By similarity). Promotes formation of apical membrane-initiation sites during the initial stages of lumen formation via Rho family-induced actin filament organization and CTNNB1 localization to cell-cell contacts (By similarity). May also hydrolyze PtdIns(1,3,4,5)P4, and could thus affect the levels of the higher inositol polyphosphates like InsP6. Involved in endochondral ossification (PubMed:23273569). {ECO:0000250|UniProtKB:F1PNY0, ECO:0000250|UniProtKB:Q6P549, ECO:0000250|UniProtKB:Q9WVR3, ECO:0000269|PubMed:11016922, ECO:0000269|PubMed:11349134, ECO:0000269|PubMed:11739414, ECO:0000269|PubMed:12235291, ECO:0000269|PubMed:12676785, ECO:0000269|PubMed:12690104, ECO:0000269|PubMed:15668240, ECO:0000269|PubMed:15735664, ECO:0000269|PubMed:16824732, ECO:0000269|PubMed:17135240, ECO:0000269|PubMed:21624956, ECO:0000269|PubMed:23273569, ECO:0000269|PubMed:9660833}.
Molecular Weight:	138.6 kDa
UniProt:	O15357
Pathways:	Platelet-derived growth Factor Receptor Signaling

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies

Application Details

	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