

Datasheet for ABIN3093129

INPP4A Protein (AA 1-977) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	INPP4A
Protein Characteristics:	AA 1-977
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This INPP4A protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Brand:	AliCE®
Sequence:	<p>MTAREHSPRH GARARAMQRA STIDVAADML GLSLAGNIQD PDEPILEFSL ACSELHTPSL</p> <p>DRKPNSFVAV SVTTPPQAFW TKHAQTEIIE GTNNPIFLSS IAFFQDSLIN QMTQVKLSVY</p> <p>DVKDRSQGTM YLLGSGTFIV KDLLQDRHHR LHLTLRSAES DRVGNITVIG WQMEEKSDQR</p> <p>PPVTRSVDTV NGRMVLVDE SLTEALGIRS KYASLRKDTL LKSVFGGAIC RMYRFPTTDG</p> <p>NHLRILEQMA ESVLSLHVPR QFVKLLLEED AARVCELEEL GELSPCWESL RRQIVTQYQT</p> <p>IILTYQENLT DLHQYRGPSF KASSLKADKK LEFVPTNLHI QRMRVQDDGG SDQNYDIVTI</p> <p>GAPAAHCQGF KSGGLRKKLH KFEETKKHFE ECCTSSGCQS IYIPQDVVR AKEIIAQINT</p> <p>LKTQVSYAE RLSRAAKDRS ATGLERTLAI LADKTRQLVT VCDCKLLANS IHGLNAARPD</p> <p>YIASKASPTS TEEEQVMLRN DQDTLMARWT GRNSRSSLQV DWHEEEWEKV WLNVDKSLEC</p> <p>IIQRVDKLLQ KERLHGECE DVFPCAGSCT SKKGNPDSHA YWIRPEDPFC DVPSSPCPST</p> <p>MPSTACHPHL TTHCSPPEE SSPGEWSEAL YPLLTTLTDC VAMMSDKAKK AMVFLLMQDS</p>

APTATYLSL QYRRDVFCQ TLTALICGFI IKLRNCLHDD GFLRQLYTIG LLAQFESLLS
TYGEELAMLE DMSLGIMDLR NVTFKVTQAT SSASADMLPV ITGNRDGFNV RVPLPGPLFD
ALPREIQSGM LLRVQPVLFN VGINEQQTLE ERFGDTSLQE VINVESLVRL NSYFEQFKEV
LPEDCLPRSR SQTCLPELLR FLGQNVHARK NKNVDILWQA AEICRRLNGV RFTSCKSAKD
RTAMSVTLEQ CLILQHEHGM APQVFTQALE CMRSEGCRRE NTMKNVGSRK YAFNSLQLKA
FPKHYPPEG TYGKVET

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!

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.

Product Details

- 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: INPP4A

Alternative Name: INPP4A ([INPP4A Products](#))

Background: Inositol polyphosphate-4-phosphatase type I A (Inositol polyphosphate 4-phosphatase type I) (Type I inositol 3,4-bisphosphate 4-phosphatase) (EC 3.1.3.66), FUNCTION: Catalyzes the hydrolysis of the 4-position phosphate of phosphatidylinositol 3,4-bisphosphate (PtdIns(3,4)P2) (PubMed:20463662, PubMed:15716355). Catalyzes also inositol 1,3,4-trisphosphate and inositol 1,4-bisphosphate (By similarity). Antagonizes the PI3K-AKT/PKB signaling pathway by dephosphorylating phosphoinositides and thereby modulating cell cycle progression and cell survival (PubMed:30071275) (By similarity). May protect neurons from excitotoxic cell death by regulating the synaptic localization of cell surface N-methyl-D-aspartate-type glutamate receptors (NMDARs) and NMDAR-mediated excitatory postsynaptic current (By similarity). {ECO:0000250|UniProtKB:Q62784, ECO:0000250|UniProtKB:Q9EPW0, ECO:0000269|PubMed:15716355, ECO:0000269|PubMed:20463662, ECO:0000269|PubMed:30071275}., FUNCTION: [Isoform 4]: Displays no 4-phosphatase activity for PtdIns(3,4)P2, Ins(3,4)P2, or Ins(1,3,4)P3. {ECO:0000269|PubMed:9295334}.

Molecular Weight: 110.0 kDa

UniProt: [Q96PE3](#)

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

Application Details

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