Datasheet for ABIN3095223

INPP5F Protein (AA 1-1132) (Strep Tag)

1 Image

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Overview

Quantity:	1 mg
Target:	INPP5F
Protein Characteristics:	AA 1-1132
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This INPP5F protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Sequence:	MELFQAKDHY ILQQGERALW CSRRDGGLQL RPATDLLLAW NPICLGLVEG VIGKIQLHSD LPWWLILIRQ KALVGKLPGD HEVCKVTKIA VLSLSEMEPQ DLELELCKKH HFGINKPEKI IPSPDDSKFL LKTFTHIKSN VSAPNKKKVK ESKEKEKLER RLLEELLKMF MDSESFYYSL TYDLTNSVQR QSTGERDGRP LWQKVDDRFF WNKYMIQDLT EIGTPDVDFW IIPMIQGFVQ IEELVVNYTE SSDDEKSSPE TPPQESTCVD DIHPRFLVAL ISRRSRHRAG MRYKRRGVDK NGNVANYVET EQLIHVHNHT LSFVQTRGSV PVFWSQVGYR YNPRPRLDRS EKETVAYFCA HFEEQLNIYK KQVIINLVDQ AGREKIIGDA YLKQVLLFNN SHLTYVSFDF HEHCRGMKFE NVQTLTDAIY DIILDMKWCW VDEAGVICKQ EGIFRVNCMD CLDRTNVVQA AIARVVMEQQ LKKLGVMPPE QPLPVKCNRI YQIMWANNGD SISRQYAGTA ALKGDFTRTG ERKLAGVMKD GVNSANRYYL NRFKDAYRQA VIDLMQGIPV TEDLYSIFTK EKEHEALHKE NQRSHQELIS QLLQSYMKLL LPDDEKFHGG WALIDCDPSL IDATHRDVDV LLLLSNSAYY VAYYDDEVDK VNQYQRLSLE NLEKIEIGPE PTLFGKPKFS CMRLHYRYKE ASGYFHTLRA VMRNPEEDGK

DTLQCIAEML QITKQAMGSD LPIIEKKLER KSSKPHEDII GIRSQNQGSL AQGKNFLMSK FSSLNQKVKQ TKSNVNIGNL RKLGNFTKPE MKVNFLKPNL KVNLWKSDSS LETMENTGVM DKVQAESDGD MSSDNDSYHS DEFLTNSKSD EDRQLANSLE SVGPIDYVLP SCGIIASAPR LGSRSQSLSS TDSSVHAPSE ITVAHGSGLG KGQESPLKKS PSAGDVHILT GFAKPMDIYC HRFVQDAQNK VTHLSETRSV SQQASQERNQ MTNQVSNETQ SESTEQTPSR PSQLDVSLSA TGPQFLSVEP AHSVASQKTP TSASSMLELE TGLHVTPSPS ESSSSRAVSP FAKIRSSMVQ VASITQAGLT HGINFAVSKV QKSPPEPEII NQVQQNELKK MFIQCQTRII QI

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 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.

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:

Product Details

- 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.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. 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:	>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)
Grade:	Crystallography grade

Target Details

Target:	INPP5F
Alternative Name:	INPP5F (INPP5F Products)
Background:	Phosphatidylinositide phosphatase SAC2 (EC 3.1.3.25) (Inositol polyphosphate 5-phosphatase F) (Sac domain-containing inositol phosphatase 2) (Sac domain-containing phosphoinositide 4-phosphatase 2) (hSAC2),FUNCTION: Inositol 4-phosphatase which mainly acts on phosphatidylinositol 4-phosphate. May be functionally linked to OCRL, which converts phosphatidylinositol 4,5-bisphosphate to phosphatidylinositol, for a sequential dephosphorylation of phosphatidylinositol 4,5-bisphosphate at the 5 and 4 position of inositol, thus playing an important role in the endocytic recycling (PubMed:25869669). Regulator of TF:TFRC and integrins recycling pathway, is also involved in cell migration mechanisms (PubMed:25869669). Modulates AKT/GSK3B pathway by decreasing AKT and GSK3B phosphorylation (PubMed:17322895). Negatively regulates STAT3 signaling pathway through inhibition of STAT3 phosphorylation and translocation to the nucleus (PubMed:25476455). Functionally important modulator of cardiac myocyte size and of the cardiac response to stress (By similarity). May play a role as negative regulator of axon regeneration after central nervous system injuries (By similarity). {ECO:0000250|UniProtKB:Q8CDA1, ECO:0000269|PubMed:17322895, ECO:0000269|PubMed:25476455,

Target Details

	ECO:0000269|PubMed:25869669}.
Molecular Weight:	128.4 kDa
UniProt:	Q9Y2H2

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. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

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

