Datasheet for ABIN3120042

PTPN4 Protein (AA 1-926) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	PTPN4
Protein Characteristics:	AA 1-926
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PTPN4 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MTARFRLPAG RTYNVRASEL ARDRQHTEVV CNILLLDNTV QAFRVNKHDQ GQVLLDIVFK HLDLTERDYF GLQLADDSTD NPRWLDPNKP IRKQLKRGSP YNLNFRVKFF VSDPNKLQEE YTRYQYFLQI KQDILTGRLS CPCNTAALLA SFAVQSELGD YNQSENLAGY LSDYSFIPNQ PQDFEKEIAK LHQQHVGLSP AEAEFNYLNA ARTLELYGVE FHYARDQSNN EILIGVMSGG ILIYKNRVRM NTFLWLKIVK ISFKCKQFFI QLRKELHESR ETLLGFNMVN YRACKTLWKA CVEHHTFFRL DRPLPPQKNF FAHYFTLGSK FRYCGRTEVQ SVQYGKEKAN KDRVFARSPS KPLARKLMDW EVVSRNSLSD DRLETQSLPS RSPPGTPNHR NSSFTQEATR VRPSSVGHLV DHVVHMSPSE DFVSQRSPSS TQANSIVLES SPSQETPEDG QPPALPPKQS KKNSWNQIHF SNSQQDLVTH TNESFDVPSS PEKSTPNGGI PHDNLVLIKM KPDENGRFGF NVKGGYDQKM PVIVSRVAPG TPADLCVPRL NEGDQVVLIN GRDIAEHTHD QVVLFIKASC EKHSGELVLL VRPNAVYDVV EEKLESEPDF QYIPEKAPLD SVHQDDHSLR ESMIQLAEGL ITGTVLAQFD

QLYRKKPGMT MSCAKLPQNI SKNRYRDISP YDATRVLLKG NEDYINANYI NMEIPSSSII NQYIACQGPL PHTCKDFWQM TWEQGSSMVV MLTTQVERGR VKCHQYWPEP SESSSYGCYQ VTCHSEEGNP AYIFRKMTLF NQEKNESRQL TQIQYTAWPD HGVPDDSSDF LDFVCHVRDQ RAGKEEPIIV HCSAGIGRTG VLITMETAMC LIECNQPVYP LDIVRTMRDQ RAMMIQTPSQ YRFVCEAILK VYEEGFVKPL TTSSNK

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

Product Details

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:	PTPN4
Alternative Name:	Ptpn4 (PTPN4 Products)
Background:	Tyrosine-protein phosphatase non-receptor type 4 (EC 3.1.3.48) (Testis-enriched protein tyrosine phosphatase),FUNCTION: Phosphatase that plays a role in immunity, learning, synaptic plasticity or cell homeostasis (PubMed:17953619, PubMed:25825441). Regulates neuronal cell homeostasis by protecting neurons against apoptosis (By similarity). Negatively regulates TLR4-induced interferon beta production by dephosphorylating adapter TICAM2 and inhibiting subsequent TRAM-TRIF interaction (PubMed:25825441). Dephosphorylates also the immunoreceptor tyrosine-based activation motifs/ITAMs of the TCR zeta subunit and thereby negatively regulates TCR-mediated signaling pathway (PubMed:18614237). May act at junctions between the membrane and the cytoskeleton. {ECO:0000250, ECO:0000250|UniProtKB:P29074, ECO:0000269|PubMed:17953619, ECO:0000269|PubMed:18614237, ECO:0000269|PubMed:25825441}.
Molecular Weight:	105.8 kDa
UniProt:	Q9WU22

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

Application Details

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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