

Datasheet for ABIN3094808

PTPN22 Protein (AA 1-807) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	PTPN22
Protein Characteristics:	AA 1-807
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PTPN22 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	<p>MDQREILQKF LDEAQSKKIT KEEFANEFLK LKRQSTKYKA DKTYPTTVAE KPKNIKKNRY</p> <p>KDILPYDYSR VELSLITSDE DSSYINANFI KGVYGPKEYI ATQGPLSTTL LDFWRMIWEY</p> <p>SVLIIVMACM EYEMGKKKCE RYWAEPGEMQ LEFGPFSVSC EAEKRKSDYI IRTLKVKFNS</p> <p>ETRTIYQFHY KNWPDHDVPS SIDPILELIW DVRCYQEDDS VPICIHCSAG CGRTGVICAI</p> <p>DYTWMLLKDG IIPENFSVFS LIREMRTQRP SLVQTQEQYE LVYNAVLELF KRQMDVIRDK</p> <p>HSGTESQAKH CIPEKNHTLQ ADSYSPNLPK STTKAAKMMN QQRTKMEIKE SSSFDFRTSE</p> <p>ISAKEELVLH PAKSSTSFDL LELNYSFDKN ADTTMKWQTK AFFIVGEPLQ KHQSLDLGSL</p> <p>LFEGCSNSKP VNAAGRYFNS KVPITRTKST PFELIQQRET KEVDSKENFS YLESQPHDSC</p> <p>FVEMQAQKVM HVSSAELNYS LPYDSKHQIR NASNVKHHDS SALGVYSYIP LVENPYFSSW</p> <p>PPSGTSSKMS LDLPEKQDGT VFPSSLLPTS STSLFSYYNS HDLSLSLNSPT NISSLLNQES</p> <p>AVLATAPRID DEIPPLPVR TPESFIVVEE AGEFSPNVPK SLSSAVKVKI GTSLEWGGTS</p>

EPKKFDDSVI LRPSKSVKLR SPKSELHQDR SSPPPPLPER TLESFFLADE DCMQAQSIET
YSTSYPDME NSTSSKQTLK TPGKSFTRSK SLKILRNMKK SICNSCPPNK PAESVQSNNNS
SSFLNFGFAN RFSKPKGPRN PPPTWNI

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.

Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression

Product Details

	System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	PTPN22
Alternative Name:	PTPN22 (PTPN22 Products)
Background:	<p>Tyrosine-protein phosphatase non-receptor type 22 (EC 3.1.3.48) (Hematopoietic cell protein-tyrosine phosphatase 70Z-PEP) (Lymphoid phosphatase) (LyP) (PEST-domain phosphatase) (PEP),FUNCTION: Acts as a negative regulator of T-cell receptor (TCR) signaling by direct dephosphorylation of the Src family kinases LCK and FYN, ITAMs of the TCRz/CD3 complex, as well as ZAP70, VAV, VCP and other key signaling molecules (PubMed:16461343, PubMed:18056643). Associates with and probably dephosphorylates CBL. Dephosphorylates LCK at its activating 'Tyr-394' residue (PubMed:21719704). Dephosphorylates ZAP70 at its activating 'Tyr-493' residue (PubMed:16461343). Dephosphorylates the immune system activator SKAP2 (PubMed:21719704). Positively regulates toll-like receptor (TLR)-induced type 1 interferon production (PubMed:23871208). Promotes host antiviral responses mediated by type 1 interferon (By similarity). Regulates NOD2-induced pro-inflammatory cytokine secretion and autophagy (PubMed:23991106). Acts as an activator of NLRP3 inflammasome assembly by mediating dephosphorylation of 'Tyr-861' of NLRP3 (PubMed:27043286). Dephosphorylates phospho-anandamide (p-AEA), an endocannabinoid to anandamide (also called N-arachidonoyl ethanolamide) (By similarity). {ECO:0000250 UniProtKB:P29352, ECO:0000269 PubMed:16461343, ECO:0000269 PubMed:18056643, ECO:0000269 PubMed:19167335, ECO:0000269 PubMed:21719704, ECO:0000269 PubMed:23871208, ECO:0000269 PubMed:23991106, ECO:0000269 PubMed:27043286}.</p>
Molecular Weight:	91.7 kDa
UniProt:	Q9Y2R2

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.
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Application Details

Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> 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.</p> <p>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!</p>
Restrictions:	For Research Use only

Handling

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