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Datasheet for ABIN3094806
PTPN14 Protein (AA 1-1187) (Strep Tag)

Overview

Quantity:	1 mg
Target:	PTPN14
Protein Characteristics:	AA 1-1187
Origin:	Human
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PTPN14 protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA

Product Details

Sequence: MPFGLKLRRTRRYNVLSKNC FVTRIRLLDS NVIECTLSVE STGQECLEAV AQRLELRETH
YFGLWFLSKS QQARWVELEK PLKKHLDKFA NEPLFFGVM FYVNVSWLQ QEATRYQYYL
QVKKDVLEGR LRCTLDQVIR LAGLAVQADF GDYNQFDSQD FLREYVLFPM DLALEEAVLE
ELTQKVAQEH KAHSGILPAE AELMYINEVE RLDGFGQEIF PVKDNHGNCV HLGIFFMGIF
VRNRIGRQAV IYRWNDMGNI THNKSTILVE LINKEETALF HTDDIENAKY ISRLFATRHK
FYKQNKICTE QSNSPPPIRR QPTWSRSSLP RQQPYILPPV HVQCGEHYSE THTSQDSIFH
GNEEALYCNS HNSLDLNYLN GTVTNGSVCS VHSVNSLNCS QSFIQASPVS SNLSIPGSDI
MRADYIPSHR HSAIIVPSYR PTPDYETVMR QMKRGILHTD SQSQSLRNLN IINTHAYNQP
EDLVYSQPEM RERHPYTPY GPQGVYSNKL VSPSDQRNPK NNVVPSKPGA SAISHTVSTP
ELANMQLQGS HNYSTAHMLK NYLFRPPPPY PRPRPATSTP DLASHRHKYV SGSSPDLVTR
KVQLSVKTFQ EDSSPVVHQS LQEVSEPLTA TKHHGTVNKR HSLEVMNSMV RGMEAMTLKS
LHLPMARRNT LREQGPPEEG SGSHEVPQLP QYHHKKTFS D ATMLIHSSSES EEEEEAPES

VPQIPMLREK MEYSAQLQAA LARIPNKPPP EYPGPRKSVS NGALRQDQAS LPPAMARARV
LRHGPAKAIS MSRTDPPAVN GASLGPSISE PDLTSVKERV KKEPVKERPV SEMFSLEDSI
IEREMMIRNL EKQKMAGLEA QKRPLMLAAL NGLSVARVSG REENRVDATR VPMDERFRTL
KKKLEEGMVF TEYEQIPKKK ANGIFSTAAL PENAERSRIR EVVPYEENRV ELIPTKENNT
GYINASHIKV VVGGAEWHYI ATQGPLPHTC HDFWQMVWEQ GVNVIAMVTA EEEGGRTKSH
RYWPKLGSKH SSATYGKFKV TTKFRTD SVC YATTGLKVKH LLSGQERTVW HLQYTDWPDH
GCPEDVQGFL SYLEEIQSVR RHTNSMLEGT KNRHPPIVVH CSAGVGRTGV LILSELMIYC
LEHNEKVEVP MMLRLLREQR MFMIQTIAQY KVVYQVLIQF LQNSRLI

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!

Product Details

Concentration:

- 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)

Target Details

Target:

PTPN14

Alternative Name:

PTPN14 ([PTPN14 Products](#))

Background:

Tyrosine-protein phosphatase non-receptor type 14 (EC 3.1.3.48) (Protein-tyrosine phosphatase pez),FUNCTION: Protein tyrosine phosphatase which may play a role in the regulation of lymphangiogenesis, cell-cell adhesion, cell-matrix adhesion, cell migration, cell growth and also regulates TGF-beta gene expression, thereby modulating epithelial-mesenchymal transition. Mediates beta-catenin dephosphorylation at adhesion junctions. Acts as a negative regulator of the oncogenic property of YAP, a downstream target of the hippo pathway, in a cell density-dependent manner. May function as a tumor suppressor. {ECO:0000269|PubMed:10934049, ECO:0000269|PubMed:12808048, ECO:0000269|PubMed:17893246, ECO:0000269|PubMed:20826270, ECO:0000269|PubMed:22233626, ECO:0000269|PubMed:22525271, ECO:0000269|PubMed:22948661}.

Molecular Weight:

135.3 kDa

UniProt:

[Q15678](#)

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)
