Datasheet for ABIN3116415

CHPF Protein (AA 1-775) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	CHPF
Protein Characteristics:	AA 1-775
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CHPF protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	MRASLLLSVL RPAGPVAVGI SLGFTLSLLS VTWVEEPCGP GPPQPGDSEL PPRGNTNAAR RPNSVQPGAE REKPGAGEGA GENWEPRVLP YHPAQPGQAA KKAVRTRYIS TELGIRQRLL VAVLTSQTTL PTLGVAVNRT LGHRLERVVF LTGARGRRAP PGMAVVTLGE ERPIGHLHLA LRHLLEQHGD DFDWFFLVPD TTYTEAHGLA RLTGHLSLAS AAHLYLGRPQ DFIGGEPTPG RYCHGGFGVL LSRMLLQQLR PHLEGCRNDI VSARPDEWLG RCILDATGVG CTGDHEGVHY SHLELSPGEP VQEGDPHFRS ALTAHPVRDP VHMYQLHKAF ARAELERTYQ EIQELQWEIQ NTSHLAVDGD QAAAWPVGIP APSRPASRFE VLRWDYFTEQ HAFSCADGSP RCPLRGADRA DVADVLGTAL EELNRRYHPA LRLQKQQLVN GYRRFDPARG MEYTLDLQLE ALTPQGGRRP LTRRVQLLRP LSRVEILPVP YVTEASRLTV LLPLAAAERD LAPGFLEAFA TAALEPGDAA AALTLLLLYE PRQAQRVAHA DVFAPVKAHV AELERRFPGA RVPWLSVQTA APSPLRLMDL LSKKHPLDTL FLLAGPDTVL TPDFLNRCRM HAISGWQAFF PMHFQAFHPA VAPPQGPGPP

ELGRDTGRFD RQAASEACFY NSDYVAARGR LAAASEQEEE LLESLDVYEL FLHFSSLHVL RAVEPALLQR YRAQTCSARL SEDLYHRCLQ SVLEGLGSRT QLAMLLFEQE QGNST

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 System (AliCE®).

Product Details

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

Target Details

Target:	CHPF
Alternative Name:	CHPF (CHPF Products)
Background:	Chondroitin sulfate synthase 2 (EC 2.4.1.175) (EC 2.4.1.226) (Chondroitin glucuronyltransferase 2) (Chondroitin-polymerizing factor) (ChPF) (Glucuronosyl-N-acetylgalactosaminyl-proteoglycan 4-beta-N-acetylgalactosaminyltransferase II) (N-acetylgalactosaminyl-proteoglycan 3-beta-glucuronosyltransferase II) (N-acetylgalactosaminyltransferase 2),FUNCTION: Has both beta-1,3-glucuronic acid and beta-1,4-N-acetylgalactosamine transferase activity. Transfers glucuronic acid (GlcUA) from UDP-GlcUA and N-acetylgalactosamine (GalNAc) from UDP-GalNAc to the non-reducing end of the elongating chondroitin polymer. Seems to act as a specific activating factor for CHSY1 in chondroitin polymerization (PubMed:12716890). {ECO:0000269|PubMed:12716890, ECO:0000269|PubMed:12761225}., FUNCTION: [Isoform 2]: May facilitate PRKN transport into the mitochondria. In collaboration with PRKN, may enhance cell viability and protect cells from oxidative stress. {ECO:0000269|PubMed:22082830}.
Molecular Weight:	85.5 kDa
UniProt:	Q8IZ52
Pathways:	Glycosaminoglycan Metabolic Process, SARS-CoV-2 Protein Interactome

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

Application Details

	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