Datasheet for ABIN3096198

USP4 Protein (AA 1-963) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	USP4
Protein Characteristics:	AA 1-963
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This USP4 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MAEGGGCRER PDAETQKSEL GPLMRTTLQR GAQWYLIDSR WFKQWKKYVG FDSWDMYNVG EHNLFPGPID NSGLFSDPES QTLKEHLIDE LDYVLVPTEA WNKLLNWYGC VEGQQPIVRK VVEHGLFVKH CKVEVYLLEL KLCENSDPTN VLSCHFSKAD TIATIEKEMR KLFNIPAERE TRLWNKYMSN TYEQLSKLDN TVQDAGLYQG QVLVIEPQNE DGTWPRQTLQ SKSSTAPSRN FTTSPKSSAS PYSSVSASLI ANGDSTSTCG MHSSGVSRGG SGFSASYNCQ EPPSSHIQPG LCGLGNLGNT CFMNSALQCL SNTAPLTDYF LKDEYEAEIN RDNPLGMKGE IAEAYAELIK QMWSGRDAHV APRMFKTQVG RFAPQFSGYQ QQDSQELLAF LLDGLHEDLN RVKKKPYLEL KDANGRPDAV VAKEAWENHR LRNDSVIVDT FHGLFKSTLV CPECAKVSVT FDPFCYLTLP LPLKKDRVME VFLVPADPHC RPTQYRVTVP LMGAVSDLCE ALSRLSGIAA ENMVVADVYN HRFHKIFQMD EGLNHIMPRD DIFVYEVCST SVDGSECVTL PVYFRERKSR PSSTSSASAL YGQPLLLSVP KHKLTLESLY QAVCDRISRY VKQPLPDEFG SSPLEPGACN GSRNSCEGED

EEEMEHQEEG KEQLSETEGS GEDEPGNDPS ETTQKKIKGQ PCPKRLFTFS LVNSYGTADI NSLAADGKLL KLNSRSTLAM DWDSETRRLY YDEQESEAYE KHVSMLQPQK KKKTTVALRD CIELFTTMET LGEHDPWYCP NCKKHQQATK KFDLWSLPKI LVVHLKRFSY NRYWRDKLDT VVEFPIRGLN MSEFVCNLSA RPYVYDLIAV SNHYGAMGVG HYTAYAKNKL NGKWYYFDDS NVSLASEDQI VTKAAYVLFY QRRDDEFYKT PSLSSSGSSD GGTRPSSSQQ GFGDDEACSM DTN

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:	USP4
Alternative Name:	USP4 (USP4 Products)
Background:	Ubiquitin carboxyl-terminal hydrolase 4 (EC 3.4.19.12) (Deubiquitinating enzyme 4) (Ubiquitin thioesterase 4) (Ubiquitin-specific-processing protease 4) (Ubiquitous nuclear protein homolog),FUNCTION: Deubiquitinating enzyme that removes conjugated ubiquitin from target proteins (PubMed:16316627, PubMed:16472766, PubMed:16339847, PubMed:20595234, PubMed:22347420, PubMed:25404403, PubMed:28604766, PubMed:30514904). Deubiquitinates PDPK1 (PubMed:22347420). Deubiquitinates TRIM21 (PubMed:16316627). Deubiquitinates receptor ADORA2A which increases the amount of functional receptor at the cell surface (PubMed:16339847). Deubiquitinates HAS2 (PubMed:28604766). Deubiquitinates RHEB in response to EGF signaling, promoting mTORC1 signaling (PubMed:30514904). May regulate mRNA splicing through deubiquitination of the U4 spliceosomal protein PRPF3 (PubMed:20595234). This may prevent its recognition by the U5 component PRPF8 thereby destabilizing interactions within the U4/U6.U5 snRNP (PubMed:20595234). May also play a role in the regulation of quality control in the ER (PubMed:16339847). {ECO:0000269|PubMed:16316627, ECO:0000269|PubMed:16339847, ECO:0000269|PubMed:16472766, ECO:0000269|PubMed:20595234, ECO:0000269|PubMed:22347420, ECO:0000269|PubMed:25404403, ECO:0000269|PubMed:28604766, ECO:0000269|PubMed:30514904}.
Molecular Weight:	108.6 kDa
UniProt:	Q13107

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

Application Details

	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. 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