

Datasheet for ABIN3096202

UBQLN4 Protein (AA 1-601) (Strep Tag)



Overview

Quantity:	250 μg	
Target:	UBQLN4	
Protein Characteristics:	AA 1-601	
Origin:	Human	
Source:	Cell-free protein synthesis (CFPS)	
Protein Type:	Recombinant	
Purification tag / Conjugate:	This UBQLN4 protein is labelled with Strep Tag.	
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)	

Brand:	AliCE®
Sequence:	MAEPSGAETR PPIRVTVKTP KDKEEIVICD RASVKEFKEE ISRRFKAQQD QLVLIFAGKI
	LKDGDTLNQH GIKDGLTVHL VIKTPQKAQD PAAATASSPS TPDPASAPST TPASPATPAQ
	PSTSGSASSD AGSGSRRSSG GGPSPGAGEG SPSATASILS GFGGILGLGS LGLGSANFME
	LQQQMQRQLM SNPEMLSQIM ENPLVQDMMS NPDLMRHMIM ANPQMQQLME RNPEISHMLN
	NPELMRQTME LARNPAMMQE MMRNQDRALS NLESIPGGYN ALRRMYTDIQ EPMFSAAREQ
	FGNNPFSSLA GNSDSSSSQP LRTENREPLP NPWSPSPPTS QAPGSGGEGT GGSGTSQVHP
	TVSNPFGINA ASLGSGMFNS PEMQALLQQI SENPQLMQNV ISAPYMRSMM QTLAQNPDFA
	AQMMVNVPLF AGNPQLQEQL RLQLPVFLQQ MQNPESLSIL TNPRAMQALL QIQQGLQTLQ
	TEAPGLVPSL GSFGISRTPA PSAGSNAGST PEAPTSSPAT PATSSPTGAS SAQQQLMQQM
	IQLLAGSGNS QVQTPEVRFQ QQLEQLNSMG FINREANLQA LIATGGDINA AIERLLGSQL S
	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 posttranslational 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®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	UBQLN4
Alternative Name:	UBQLN4 (UBQLN4 Products)
Background:	Ubiquilin-4 (Ataxin-1 interacting ubiquitin-like protein) (A1Up) (Ataxin-1 ubiquitin-like-interacting
	protein A1U) (Connexin43-interacting protein of 75 kDa) (CIP75),FUNCTION: Regulator of
	protein degradation that mediates the proteasomal targeting of misfolded, mislocalized or
	accumulated proteins (PubMed:15280365, PubMed:27113755, PubMed:29666234,
	PubMed:30612738). Acts by binding polyubiquitin chains of target proteins via its UBA domain
	and by interacting with subunits of the proteasome via its ubiquitin-like domain
	(PubMed:15280365, PubMed:27113755, PubMed:30612738). Key regulator of DNA repair that
	represses homologous recombination repair: in response to DNA damage, recruited to sites or
	DNA damage following phosphorylation by ATM and acts by binding and removing
	ubiquitinated MRE11 from damaged chromatin, leading to MRE11 degradation by the
	proteasome (PubMed:30612738). MRE11 degradation prevents homologous recombination
	repair, redirecting double-strand break repair toward non-homologous end joining (NHEJ)
	(PubMed:30612738). Specifically recognizes and binds mislocalized transmembrane-
	containing proteins and targets them to proteasomal degradation (PubMed:27113755).
	Collaborates with DESI1/POST in the export of ubiquitinated proteins from the nucleus to the
	cytoplasm (PubMed:29666234). Also plays a role in the regulation of the proteasomal
	degradation of non-ubiquitinated GJA1 (By similarity). Acts as an adapter protein that recruits
	UBQLN1 to the autophagy machinery (PubMed:23459205). Mediates the association of
	UBQLN1 with autophagosomes and the autophagy-related protein LC3 (MAP1LC3A/B/C) and
	may assist in the maturation of autophagosomes to autolysosomes by mediating
	autophagosome-lysosome fusion (PubMed:23459205). {ECO:0000250 UniProtKB:Q99NB8,
	ECO:0000269 PubMed:15280365, ECO:0000269 PubMed:23459205,
	ECO:0000269 PubMed:27113755, ECO:0000269 PubMed:29666234,
	ECO:0000269 PubMed:30612738}.
Molecular Weight:	63.9 kDa
JniProt:	Q9NRR5
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.

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