

## Datasheet for ABIN3136155

# FBXL2 Protein (AA 1-423) (Strep Tag)



### Overview

Quantity:	1 mg
Target:	FBXL2
Protein Characteristics:	AA 1-423
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This FBXL2 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Brand:	AliCE®
Sequence:	MVFSNSDDGL INKKLPKELL LRIFSFLDIV TLCRCAQISK AWNILALDGS NWQRVDLFNF
	QTDVEGRVVE NISKRCGGFL RKLSLRGCIG VGDSSLKTFA QNCRNIEHLN LNGCTKITDS
	TCYSLSRFCS KLKHLDLTSC VSVTNSSLKG ISEGCRNLEY LNLSWCDQIT KEGIEALVRG
	CRGLKALLLR GCTQLEDEAL KHIQNHCHEL VSLNLQSCSR ITDDGVVQIC RGCHRLQALC
	LSGCSNLTDA SLTALGLNCP RLQVLEAARC SHLTDAGFTL LARNCHELEK MDLEECVLIT
	DSTLVQLSIH CPKLQALSLS HCELITDEGI LHLSSSTCGH ERLRVLELDN CLLVTDASLE
	HLENCRGLER LELYDCQQVT RAGIKRMRAQ LPHVKVHAYF APVTPPPAVA GSGHRLCRCC VIL
	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.

- 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:	FBXL2

## **Target Details**

Alternative Name:	Fbxl2 (FBXL2 Products)
Background:	F-box/LRR-repeat protein 2 (F-box and leucine-rich repeat protein 2),FUNCTION: Calcium-
	activated substrate recognition component of the SCF (SKP1-cullin-F-box protein) E3 ubiquitin-
	protein ligase complex, SCF(FBXL2), which mediates the ubiquitination and subsequent
	proteasomal degradation of target proteins (PubMed:21343341, PubMed:23542741). Unlike
	many F-box proteins, FBXL2 does not seem to target phosphodegron within its substrates but
	rather calmodulin-binding motifs and is thereby antagonized by calmodulin (By similarity). This
	is the case for the cyclins CCND2 and CCND3 which polyubiquitination and subsequent
	degradation are inhibited by calmodulin (By similarity). Through CCND2 and CCND3
	degradation induces cell-cycle arrest in G(0) (By similarity). SCF(FBXL2) also mediates PIK3R2
	ubiquitination and proteasomal degradation thereby regulating phosphatidylinositol 3-kinase
	signaling and autophagy (By similarity). PCYT1A monoubiquitination by SCF(FBXL2) and
	subsequent degradation regulates synthesis of phosphatidylcholine, which is utilized for
	formation of membranes and of pulmonary surfactant (PubMed:21343341). The SCF(FBXL2)
	complex acts as a regulator of inflammation by mediating ubiquitination and degradation of
	TRAF proteins (TRAF1, TRAF2, TRAF3, TRAF4, TRAF5 and TRAF6) (PubMed:23542741). The
	SCF(FBXL2) complex acts as a negative regulator of the NLRP3 inflammasome by mediating
	ubiquitination and degradation of NLRP3 (By similarity). {ECO:0000250 UniProtKB:Q9UKC9,
	ECO:0000269 PubMed:21343341, ECO:0000269 PubMed:23542741}.
Molecular Weight:	46.9 kDa
UniProt:	Q8BH16
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
Comment.	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
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	components needed for protein production (amino acids, cofactors, etc.) are added to produce

## **Application Details**

	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 <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months