

# Datasheet for ABIN3131516

# KPNA6 Protein (AA 1-536) (Strep Tag)



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Quantity:	250 μg
Target:	KPNA6
Protein Characteristics:	AA 1-536
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KPNA6 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

## Product Details

FIOUUCI Details	
Brand:	AliCE®
Sequence:	METMASPGKD NYRMKSYKNN ALNPEEMRRR REEEGIQLRK QKREQQLFKR RNVELINEEA
	AMFDSLLMDS YVSSTTGESV ITREMVEMLF SDDSDLQLAT TQKFRKLLSK EPSPPIDEVI
	NTPGVVDRFV EFLKRNENCT LQFEAAWALT NIASGTSQQT KIVIEAGAVP IFIELLNSDF
	EDVQEQAVWA LGNIAGDSSL CRDYVLNCSI LNPLLTLLTK STRLTMTRNA VWALSNLCRG
	KNPPPEFAKV SPCLPVLSRL LFSSDSDLLA DACWALSYLS DGPNEKIQAV IDSGVCRRLV
	ELLMHNDYKV ASPALRAVGN IVTGDDIQTQ VILNCSALPC LLHLLSSSKE SIRKEACWTI
	SNITAGNRAQ IQAVIDANIF PVLIEILQKA EFRTRKEAAW AITNATSGGT PEQIRYLVSL
	GCIKPLCDLL TVMDSKIVQV ALNGLENILR LGEQESKRSG SGVNPYCGLI EEAYGLDKIE
	FLQSHENQEI YQKAFDLIEH YFGVEDDDSS LAPQVDETQQ QFIFQQPEAP MEGFQL
	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:	KPNA6
Alternative Name:	Kpna6 (KPNA6 Products)
Background:	Importin subunit alpha-7 (Importin alpha-S2) (Karyopherin subunit alpha-6),FUNCTION:  Functions in nuclear protein import as an adapter protein for nuclear receptor KPNB1. Binds specifically and directly to substrates containing either a simple or bipartite NLS motif. Docking of the importin/substrate complex to the nuclear pore complex (NPC) is mediated by KPNB1 through binding to nucleoporin FxFG repeats and the complex is subsequently translocated through the pore by an energy requiring, Ran-dependent mechanism. At the nucleoplasmic side of the NPC, Ran binds to importin-beta and the three components separate and importin-alpha and -beta are re-exported from the nucleus to the cytoplasm where GTP hydrolysis releases Ran from importin. The directionality of nuclear import is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus.
Molecular Weight:	60.0 kDa
UniProt:	035345
Pathways:	Protein targeting to Nucleus
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!

# 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