

Datasheet for ABIN3088894

AP4B1 Protein (AA 1-739) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	AP4B1
Protein Characteristics:	AA 1-739
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This AP4B1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MPYLGSEDVV KELKKALCNP HIQADRLRYR NVIQRVIRYM TQGLDMSGVF MEMVKASATV</p> <p>DIVQKKLVYL YMCTYAPLKP DLALLAINTL CKDCSDPNPM VRGLALRSMC SLRMPGVQEY</p> <p>IQQPILNGLR DKASYVRRVA VLGCAMHNL HGDSEVDGAL VNELYSLLRD QDPIVVVNCL</p> <p>RSLEEILKQE GGVVINKPIA HHLLNRMSKL DQWGQAEVLN FLLRYQPRSE EELFDILNLL</p> <p>DSFLKSSSPG VVMGATKLFL ILAKMFPHVQ TDVLRVKGP LLAACSSER ELCFVALCHV</p> <p>RQILHSLPGH FSSHYKKFFC SYSEPHYIKL QKVEVLCELV NDENVQQVLE ELRGYCTDVS</p> <p>ADFAQAAIFA IGGIARTYTD QCVQILTELL GLRQEHITTV VVQTFRDLVW LCPQCTEAVC</p> <p>QALPGCEENI QDSEGKQALI WLLGVHGERI PNAPYVLEDF VENVKSETFP AVKMELLTAL</p> <p>LRLFLSRPAE CQDMLGRLLY YCIEEEKDMA VRDRGLFYR LLLVGIDEVK RILCSPKSDP</p> <p>TLGLLEDPAE RPVNSWASDF NTLVPVYGKA HWATISKQCG AERCDPELPK TSSFAASGPL</p> <p>IPEENKERVQ ELPDSGALML VPNRQLTADY FEKTWLSLKV AHQQVLPWRG EFHPDTLQMA</p>

LQVVNIQTIA MSRAGSRPWK AYLSAQDDTG CLFLTELLLE PGNSEMQISV KQNEARTETL
NSFISVLETV IGTIEEIKS

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: AP4B1

Alternative Name: AP4B1 ([AP4B1 Products](#))

Background: AP-4 complex subunit beta-1 (AP-4 adaptor complex subunit beta) (Adaptor-related protein complex 4 subunit beta-1) (Beta subunit of AP-4) (Beta4-adaptin),FUNCTION: Component of the adaptor protein complex 4 (AP-4). Adaptor protein complexes are vesicle coat components involved both in vesicle formation and cargo selection. They control the vesicular transport of proteins in different trafficking pathways (PubMed:10066790, PubMed:10436028). AP-4 forms a non clathrin-associated coat on vesicles departing the trans-Golgi network (TGN) and may be involved in the targeting of proteins from the trans-Golgi network (TGN) to the endosomal-lysosomal system. It is also involved in protein sorting to the basolateral membrane in epithelial cells and the proper asymmetric localization of somatodendritic proteins in neurons. AP-4 is involved in the recognition and binding of tyrosine-based sorting signals found in the cytoplasmic part of cargos, but may also recognize other types of sorting signal (Probable). {ECO:0000269|PubMed:10066790, ECO:0000269|PubMed:10436028, ECO:0000305|PubMed:10066790, ECO:0000305|PubMed:10436028}.

Molecular Weight: 83.3 kDa

UniProt: [Q9Y6B7](#)

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.

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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