

Datasheet for ABIN3088990

AP4E1 Protein (AA 1-1137) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	250 µg
Target:	AP4E1
Protein Characteristics:	AA 1-1137
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This AP4E1 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MSDIVEKTLT ALPGLFLQNQ PGGGPAAAKA SFSSRLGSLV RGITALTSKH EEEKLIQQEL</p> <p>SSLKATVSAP TTTLKMMKEC MVRLIYCEML GYDASFGYIH AIKLAQQGNL LEKRVGYLAV</p> <p>SLFLHESHEL LLLLNTVVK DLQSTNLVEV CMALTVVSI FPCEMIPAVL PLIEDKLQHS</p> <p>KEIVRRKAVL ALYKFHLIAP NQVQHIHIF RKALCDRDVG VMAASLHIYL RMIKENSSGY</p> <p>KDLTGSFVTI LKQVVGKLP VEFNYHSVPA PWLQIQLLRI LGLLGKDDQR TSELMYDVLD</p> <p>ESLRRRAELNH NVTYAILFEC VHTVYSIYPK SELLEKAAKC IGKFVLSPKI NLKYLGLKAL</p> <p>TYVIQQDPTL ALQHQMTIIE CLDHPDPIIK RETLELLYRI TNAQNITVIV QKMLEYLHQS</p> <p>KEEYVIVNLV GKIAELAKEY APDNAWFIQT MNAVFSVGGD VMHPDIPNNF LRLLAEGFDD</p> <p>ETEDQQLRLY AVQSYLTLLD MENVFYPQRF LQVMSWVLGE YSYLLDKETP EEVIAKLYKL</p> <p>LMNDSVSSET KAWLIAAVTK LTSQAHSSNT VERLIHEFTI SLDTCMRQHA FELKHLHENV</p> <p>ELMKSLLPVD RSCEDLVVDA SLSFLDGFVA EGLSQGAAPY KPPHQRQEEK LSQEKVLNFE</p>

PYGLSFSSSG FTGRQSPAGI SLGSDVSGNS AETGLKETNS LKLEGIKKLW GKEGYLPKKE
SKTGDESGAL PVPQESIMEN VDQAITKKDQ SQVLTQSKEE KEKQLLASSL FVGLGSESTI
NLLGKADTVS HKFRRKSKVK EAKSGETTST HNMTCSSFSS LSNVAYEDDY YSNTLHDTGD
KELKKFSLTS ELLDSESLTE LPLVEKFSSY SLSTPSLFAN NNMEIFHPPQ STAASVAKES
SLASSFLEET TEYIHSNAME VCNNETISVS SYKIWKDDCL LMVWSVTNKS GLELKSADLE
IFPAENFKVT EQPGCCLPVM EAESTKSFQY SVQIEKPFTE GNLTGFISYH MMDTHSAQLE
FSVNLSLLDF IRPLKISSDD FGKLWLSFAN DVKQNVKMSE SQAALPSALK TLQQLRLHI
IEIIGNEGLL ACQLLPSIPC LLHCRVHADV LALWFRSSCS TLPDYLLYQC QKVMESG

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:

Product Details

- 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: AP4E1

Alternative Name: AP4E1 ([AP4E1 Products](#))

Background: AP-4 complex subunit epsilon-1 (AP-4 adaptor complex subunit epsilon) (Adaptor-related protein complex 4 subunit epsilon-1) (Epsilon subunit of AP-4) (Epsilon-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: 127.3 kDa

UniProt: [Q9UPM8](#)

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:

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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