Datasheet for ABIN3137051

ALPK1 Protein (AA 1-1231) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	ALPK1
Protein Characteristics:	AA 1-1231
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ALPK1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MNNQDAVASI LHECKQVLDR LLLETPDVST EDKSEDQRCR ASLPSELRTL IQEAEEMKWP FVPEKWQYKQ AMSPEDKTNL QDVIGAGLQQ LLAALRASIL VQDCAAASAI VFLMDRFLYG LDVSGKLLQV AKGLHKLKPA TPIAPQVVIR QARVSVNSGK LLKAEYILSS LISNNGATGT WLYRNESDKV LVQSVCIQIR GQILQKLGMW YEAAELIWAS VIGYLTLPQP DKKGISTSLG ILADIFVSMS KTDYEKFKKS PKVNLALLKE FDHHLLSAAE ACKLAAAFSA YTPLFVLRAV NIRGTCLLSY SCSADCPPGM KSVHLCEAKE AFEIGLLTKK DGELVSGKQE LHSFIKAAFG LTTVHSRLHG ETDAVRAARQ LCSEAVGKLY TFSTSPTSQD REGLSQEIMS LISQVKGHLR VQSFPNLDVC SYVPESFKCG LDRLILHGHV DFQQILETYS QHHTSVCEVF ESTCGNSKSN QRDTKSEVCI TTLKTETNTA DTMVATLERV SSQDSRSTAS SKMSKKDQGK LQRERGRSWT RSKAFRVSLD LDMETETEPP NHSNGGTDVF NKSLRDNSSS CSWGRLSGLS SSTSWEEVNC AVQDVVRKGS GQEKHPVEAQ SSEAVSEEPK RNRSSRAVFL SSKLRGVSLQ TTGDDNLESS

PSQLHNHTSI LPFNAKDTCL ASGAGLVETA EGSNNTSLQS SHSCGSDSWS LSSSDRFTDV TTNPSVQEEE PSGIMGDVPE SKYDFKDWHG EKNGGTLTEI CTGPELTFAP SSVDPEGETA ESTDDGLSPS QVALGCLEGS HSMSTRRTFF PDGSVQNADS AKTGCSVRDQ TVDPDASTVD EEGQMLDSTE VCSIGQDGAH RPRALRSGQS AEGPKSFVNG SRPSPIFDED FSTTEEGEEL GSMLKSSQNS SSYSPWWLKS PAFSRSSSDG ESSWSLLNSS RSSFASLAGQ TSQEILEART LQPDDLEKLL AGVRHDWLLQ RLENTGVLKS NQLQQAHSAL LLKYSKKSEL WTAQETVVYL GDYLKVKKKG KQRNAFWVHY LHQEETLGRY VGKEYKERKG LRHHFTDVER QMTAQHYVTE FNKRLYEQKI PTQIFYVPST ILLILEDRTI KGCISVEPYI LGEFVKLSNN TKVVKNEYKA TEYGLAYGHF SYEFSNHRDV VVDLQGWVTG NGKGLIYLTD PQIHSVDQKD VTTNFGKRGI FYFFNNQHAS CNEICHRLSL TRPSLEQTSK V

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!

Product Details

	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:	ALPK1
Alternative Name:	Alpk1 (ALPK1 Products)
Background:	Alpha-protein kinase 1 (EC 2.7.11.1),FUNCTION: Serine/threonine-protein kinase that detects bacterial pathogen-associated molecular pattern metabolites (PAMPs) and initiates an innate immune response, a critical step for pathogen elimination and engagement of adaptive immunity (By similarity). Specifically recognizes and binds ADP-D-glycero-beta-D-manno-heptose (ADP-Heptose), a potent PAMP present in all Gram-negative and some Gram-positive bacteria (PubMed:30111836). ADP-Heptose-binding stimulates its kinase activity to phosphorylate and activate TIFA, triggering pro-inflammatory NF-kappa-B signaling (By similarity). May be involved in monosodium urate monohydrate (MSU)-induced inflammation by mediating phosphorylation of unconventional myosin MYO9A (By similarity). May also play a role in apical protein transport by mediating phosphorylation of unconventional myosin MYO1A (By similarity). May play a role in ciliogenesis (By similarity). {ECO:0000250|UniProtKB:Q96QP1, ECO:0000269|PubMed:30111836}.
Molecular Weight:	136.1 kDa
UniProt:	Q9CXB8

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:	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!
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