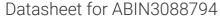
antibodies .- online.com





ALPK1 Protein (AA 1-1244) (Strep Tag)



Image



Overview

Quantity:	1 mg
Target:	ALPK1
Protein Characteristics:	AA 1-1244
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ALPK1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:

MNNQKVVAVL LQECKQVLDQ LLLEAPDVSE EDKSEDQRCR ALLPSELRTL IQEAKEMKWP FVPEKWQYKQ AVGPEDKTNL KDVIGAGLQQ LLASLRASIL ARDCAAAAAI VFLVDRFLYG LDVSGKLLQV AKGLHKLQPA TPIAPQVVIR QARISVNSGK LLKAEYILSS LISNNGATGT WLYRNESDKV LVQSVCIQIR GQILQKLGMW YEAAELIWAS IVGYLALPQP DKKGLSTSLG ILADIFVSMS KNDYEKFKNN PQINLSLLKE FDHHLLSAAE ACKLAAAFSA YTPLFVLTAV NIRGTCLLSY SSSNDCPPEL KNLHLCEAKE AFEIGLLTKR DDEPVTGKQE LHSFVKAAFG LTTVHRRLHG ETGTVHAASQ LCKEAMGKLY NFSTSSRSQD REALSQEVMS VIAQVKEHLQ VQSFSNVDDR SYVPESFECR LDKLILHGQG DFQKILDTYS QHHTSVCEVF ESDCGNNKNE QKDAKTGVCI TALKTEIKNI DTVSTTQEKP HCQRDTGISS SLMGKNVQRE LRRGGRRNWT HSDAFRVSLD QDVETETEPS DYSNGEGAVF NKSLSGSQTS SAWSNLSGFS SSASWEEVNY HVDDRSARKE PGKEHLVDTQ CSTALSEELE NDREGRAMHS LHSQLHDLSL QEPNNDNLEP SQNQPQQMP LTPFSPHNTP GIFLAPGAGL LEGAPEGIQE VRNMGPRNTS AHSRPSYRSA

SWSSDSGRPK NMGTHPSVQK EEAFEIIVEF PETNCDVKDR QGKEQGEEIS ERGAGPTFKA
SPSWVDPEGE TAESTEDAPL DFHRVLHNSL GNISMLPCSS FTPNWPVQNP DSRKSGGPVA
EQGIDPDAST VDEEGQLLDS MDVPCTNGHG SHRLCILRQP PGQRAETPNS SVSGNILFPV
LSEDCTTTEE GNQPGNMLNC SQNSSSSSVW WLKSPAFSSG SSEGDSPWSY LNSSGSSWVS
LPGKMRKEIL EARTLQPDDF EKLLAGVRHD WLFQRLENTG VFKPSQLHRA HSALLLKYSK
KSELWTAQET IVYLGDYLTV KKKGRQRNAF WVHHLHQEEI LGRYVGKDYK EQKGLWHHFT
DVERQMTAQH YVTEFNKRLY EQNIPTQIFY IPSTILLILE DKTIKGCISV EPYILGEFVK
LSNNTKVVKT EYKATEYGLA YGHFSYEFSN HRDVVVDLQG WVTGNGKGLI YLTDPQIHSV
DQKVFTTNFG KRGIFYFFNN QHVECNEICH RLSLTRPSME KPCT

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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 in several dilutions and is measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®):

- 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE.
- Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity:

>80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Endotoxin Level:

Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Grade:

Crystallography grade

Target Details

Target:

ALPK1

Alternative Name:

ALPK1 (ALPK1 Products)

Background:

Alpha-protein kinase 1 (EC 2.7.11.1) (Chromosome 4 kinase) (Lymphocyte alpha-protein kinase), 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 (PubMed:28877472, PubMed:28222186, PubMed:30111836). Specifically recognizes and binds ADP-D-glycero-beta-D-manno-heptose (ADP-Heptose), a potent PAMP present in all Gram-negative and some Grampositive bacteria (PubMed:30111836). ADP-Heptose-binding stimulates its kinase activity to phosphorylate and activate TIFA, triggering pro-inflammatory NF-kappa-B signaling (PubMed:30111836). May be involved in monosodium urate monohydrate (MSU)-induced inflammation by mediating phosphorylation of unconventional myosin MYO9A (PubMed:27169898). May also play a role in apical protein transport by mediating phosphorylation of unconventional myosin MYO1A (PubMed:15883161). May play a role in ciliogenesis (PubMed:30967659). {ECO:0000269|PubMed:15883161,

ECO:0000269 PubMed:27169898, ECO:0000269 PubMed:28222186,
ECO:0000269 PubMed:28877472, ECO:0000269 PubMed:30111836,
ECO:0000269 PubMed:30967659}.
138.9 kDa
Q96QP1
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.
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.
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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!
For Research Use only
Liquid
The buffer composition is at the discretion of the manufacturer. If you have a special request,

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

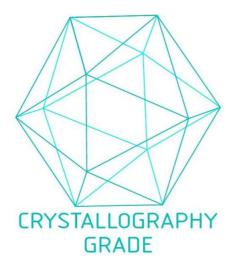


Image 1. "Crystallography Grade" protein due to multi-step, protein-specific purification process