

Datasheet for ABIN7564957

## ALPK1 Protein (AA 1-1231) (His tag)



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### Overview

Quantity:	1 mg
Target:	ALPK1
Protein Characteristics:	AA 1-1231
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ALPK1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Purpose:	Custom-made recombinat Alpk1 Protein expressed in mammalian cells.
Sequence:	<p>MNNQDAVASI LHECKQVLDR LLETPDVST EDKSEDQRCR ASLPSELRTL IQEAEEMKWP</p> <p>FVPEKWQYKQ AMSPEDKTNL QDVIGAGLQQ LLAALRASIL VQCAAASAI VFLMDRFLYG</p> <p>LDVSGKLLQV AKGLHKLKPA TPIAPQVVIR QARVSVNSGK LLKAEYLSS LISNNGATGT</p> <p>WLYRNESDKV LVQSVCIQIR GQILQKLGMW YEAELIWAS VIGYLTLPQP DKKGISTSLG</p> <p>ILADIFVSMS KTDYEKFKKS PKVNLALLKE FDHLLSAAE ACKLAAAFSA YTPLFVLRAV</p> <p>NIRGTCLLSY SCSADCPPGM KSVHLCEAKE AFEIGLLTKK DGELVSGKQE LHSFIKAAFG</p> <p>LTTVHSRLHG ETDVRAARQ LCSEAVGKLY TFSTSPTSQD REGLSQEIMS LISQVKGHLR</p> <p>VQSFPNLDVC SYVPESFKCG LDRILHGHV DFQQILETYS QHHTSVCEVF ESTCGNSKSN</p> <p>QRDTKSEVCI TTLKTETNTA DTMVATLERV SSQDSRSTAS SKMSKDKQGK LQRERGRSWT</p> <p>RSKAFRVSLD LDMETETEPN NHSNGGTDVF NKSLRDNSSS CSWGRLSGLS SSTSWEEVNC</p> <p>AVQDVVRKGS GQEKHPVEAQ SSEAVSEEPK RNRSSRAVFL SSKLRGVSLQ TTGDDNLESS</p>

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

**Sequence without tag. The proposed Purification-Tag is based on experiences 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:	<p>Key Benefits:</p> <ul style="list-style-type: none"><li>• Made to order protein - from design to production - by highly experienced protein experts.</li><li>• Protein expressed in mammalian cells and purified in one-step affinity chromatography</li><li>• The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.</li><li>• State-of-the-art algorithm used for plasmid design (Gene synthesis).</li></ul> <p>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.</p> <p>If you are not interested in a full length protein, please contact us for individual protein fragments.</p> <p>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.</p>
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Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
Grade:	custom-made

Target Details

Target:	ALPK1
Alternative Name:	Alpk1 (ALPK1 Products)

## Target Details

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 guarantee though.

Restrictions: For Research Use only

## Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months