

Datasheet for ABIN7552084

## ALPK1 Protein (AA 1-1244) (His tag)



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### Overview

Quantity:	1 mg
Target:	ALPK1
Protein Characteristics:	AA 1-1244
Origin:	Human
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 recombinant ALPK1 Protein expressed in mammalian cells.
Sequence:	<p>MNNQKVAVL LQECKQVLDQ LLLEAPDVSE EDKSEDQRCR ALLPSELRTL IQEAKEMKWP</p> <p>FVPEKWQYKQ AVGPEDKTNL KDVIGAGLQQ LLASLRASIL ARDCAAAAAI VFLVDRFLYG</p> <p>LDVSGKLLQV AKGLHKLQPA TPIAPQVVIR QARISVNSGK LLKAEYILSS LISNNGATGT</p> <p>WLYRNESDKV LVQSVCIQIR GQILQKLGMW YEAAELIWAS IVGYLALPQP DKKGLSTSLG</p> <p>ILADIFVSMS KNDYEKFKNN PQINLSLLKE FDHLLSAAE ACKLAAAFSA YTPLFVLTAV</p> <p>NIRGTCLLSY SSSNDCPEL KNLHLCEAKE AFEIGLLTKR DDEPVTGKQE LHSFVKAAFG</p> <p>LTTVHRRHLG ETGTVHAASQ LCKEAMGKLY NFSTSSRSQD REALSQEVMS VIAQVKEHLQ</p> <p>VQSFSNVDDR SYVPESFECD LDKLILHGQG DFQKILDTYS QHHTSVCEVF ESDCGNNKNE</p> <p>QKDAKTGVCI TALKTEIKNI DTVSTTQEQP HCQRDTGISS SLMGKNVQRE LRRGGRRNWT</p> <p>HSDAFRVSLD QDVETETEPS DYSNGEGAVF NKSLSGSQTS SAWSNLSGFS SSASWEEVNY</p> <p>HVDDRSARKE PGKEHLVDTQ CSTALSEELE NDREGRAMHS LHSQLHDLSTL QEPNNDNLEP</p>

SQNQPQQQMP LTPFSPHNTG GIFLAPGAGL LEGAPEGIIQE VRNMGPRNTS AHSRPSYRSA  
SWSSDSGRPK NMGTHPSVQK EEAFFIIEVF PETNCDVKDR QGKEQGEEIS ERGAGPTFKA  
SPSWVDPEGE TAESTEDAPL DFHRVLHNSL GNISMLPCSS FTPNWPVQNP DSRKSGGPVA  
EQGIDPDAST VDEEGQLLDS MDVPCTNGHG SHRLCILRQP PGQRAETPNS SVSGNILFPV  
LSEDCTTTEE GNQPGNMLNC SQNSSSSSVW WLKSPAFSSG SSEGDSPWSY LNSSGSSWVS  
LPGKMRKEIL EARTLQPDDF EKLLAGVRHD WLFQRLNTG VFKPSQLHRA HSALLLKYSK  
KSELWTAQET IVYLG DYLT V KKKGRQRNAF WWHHLHQEEI LGRYVGKDYK EQKGLWHHFT  
DVERQMTAQH YVTEFNKRLY EQNIPTQIFY IPSTILLILE DKTIKGCISV EPYILGEFVK  
LSNNTKVVKY EYKATEYGLA YGHFSYEFSN HRDVVVDLQG WVTGNGKGLI YLTDPQIHSV  
DQKVFTTNFG KRGIFYFFNN QHVECNEICH RLSLTRPSME KPCT **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
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Grade:	custom-made
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Target Details

Target:	ALPK1
Alternative Name:	ALPK1 (ALPK1 Products)

## Target Details

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 Gram-positive 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}.
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Molecular Weight:	138.9 kDa
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UniProt:	<a href="#">Q96QP1</a>
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## 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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Restrictions:	For Research Use only
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## Handling

Format:	Liquid
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Buffer:	The buffer composition is at the discretion of the manufacturer.
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Handling Advice:	Avoid repeated freeze-thaw cycles.
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Storage:	-80 °C
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Storage Comment:	Store at -80°C.
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Expiry Date:	12 months
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