

Datasheet for ABIN3135051  
**AAK1 Protein (AA 1-959) (His tag)**



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1 Image

Overview

Quantity:	1 mg
Target:	AAK1
Protein Characteristics:	AA 1-959
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This AAK1 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence: MKKFFDSRRE QGSSGLGSGS SGGGGSSSGL GSGYIGRVFG IGRQQVTVDE VLAEGGFALV  
FLVRTSNGVK CALKRMFVNN EHDLQVCKRE IQIMRDLSGH KNIVGYIDSS INNVSSGDVW  
EVLILMDFCR GGQVVNLMNQ RLQTGFTENE VLQIFCDTCE AVARLHQCKT PIIHRDLKVE  
NILLHDRGHY VLCDFGSATN KFQNPQAEV NAVEDIKKY TTLSYRAPEM VNLYSGKIIT  
TKADIWALGC LLYKLCYFTL PFGESQVAIC DGSFTIPDNS RYSQDMHCLI RYMLEPDPDK  
RPDIYQVSYF SFKLLKKECP VPNVQNSPIP AKLPEPVKAS EAAVKKTKPK ARLTDPIPTT  
ETSIAPRQRP KAGQTQPNPG ILPIQPALTP RKRATVQPLP QAAGPSNQPG LLPSVSQPKA  
QATPSQPLQS SQPKQPQAPP TPQQTPATQT QGLPTQAQAT PQHQQQHLLK QQQQQQQQPQ  
QPTAPPQAG TFYQQQQQQQ QQAQTTQFQ AVHPAAQPV TAQFPVGSQG GAQQQLMQNF  
YHQQQQQQQQ QQQLMAQAA LQKTAVVVP QSQAQPATAP QAAAAQEPGQ IQAPVRQQPK  
VQTTPTTIQ GQKVGSLTPP SSPKTQRAGH RRILSDVTHS AVFGVPASKS TQLLQAAAAE  
ASLNKSKSAT TTPSGSPRTS QQNVSNASEG STWNPFDDDN FSKLTAEELL NKDFAKLGEG

KLPEKLGSSA ESLIPGFQPT QGDAFTTPSF SAGTAEKRKG GQAVDSGIPL LSVSDPFIPL  
QVPDAPEKLI EGLKSPDTSLLPDLMPMTD PFGSTSDAVI DKADVAVESL IPGLEPPVAQ  
RLPSQTESVT SNRTDSLGTGE DSSLDCSLLS NPTAGLLEEF APIALSAPTH KAAEDSNLIS  
GFGVAEGSEK VADEFDPIP VLITKNTQGG HSRNSSGSSE SSLPNLARSL LLVDQLIDL

**Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

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### Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Mouse Aak1 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

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.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

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### Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
2. 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.

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### Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

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## Product Details

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Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

## Target Details

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Target:	AAK1
Alternative Name:	Aak1 ( <a href="#">AAK1 Products</a> )
Background:	Regulates clathrin-mediated endocytosis by phosphorylating the AP2M1/mu2 subunit of the adaptor protein complex 2 (AP-2) which ensures high affinity binding of AP-2 to cargo membrane proteins during the initial stages of endocytosis. Isoform 1 and isoform 2 display similar levels of kinase activity towards AP2M1. Regulates phosphorylation of other AP-2 subunits as well as AP-2 localization and AP-2-mediated internalization of ligand complexes. Phosphorylates NUMB and regulates its cellular localization, promoting NUMB localization to endosomes. Binds to and stabilizes the activated form of NOTCH1, increases its localization in endosomes and regulates its transcriptional activity (By similarity). {ECO:0000250}.
Molecular Weight:	104.3 kDa Including tag.
UniProt:	<a href="#">Q3UHJ0</a>

## Application Details

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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.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

## Handling

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Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.

## Handling

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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: Unlimited (if stored properly)

## Images

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**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process