Datasheet for ABIN3090059

NAIP Protein (AA 1-1403) (His tag)

1 Image

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Overview

Quantity:	1 mg
Target:	NAIP
Protein Characteristics:	AA 1-1403
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NAIP protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

Product Details

Sequence:	MATQQKASDE RISQFDHNLL PELSALLGLD AVQLAKELEE EEQKERAKMQ KGYNSQMRSE AKRLKTFVTY EPYSSWIPQE MAAAGFYFTG VKSGIQCFCC SLILFGAGLT RLPIEDHKRF HPDCGFLLNK DVGNIAKYDI RVKNLKSRLR GGKMRYQEEE ARLASFRNWP FYVQGISPCV LSEAGFVFTG KQDTVQCFSC GGCLGNWEEG DDPWKEHAKW FPKCEFLRSK KSSEEITQYI QSYKGFVDIT GEHFVNSWVQ RELPMASAYC NDSIFAYEEL RLDSFKDWPR ESAVGVAALA KAGLFYTGIK DIVQCFSCGG CLEKWQEGDD PLDDHTRCFP NCPFLQNMKS SAEVTPDLQS RGELCELLET TSESNLEDSI AVGPIVPEMA QGEAQWFQEA KNLNEQLRAA YTSASFRHMS LLDISSDLAT DHLLGCDLSI ASKHISKPVQ EPLVLPEVFG NLNSVMCVEG EAGSGKTVLL KKIAFLWASG CCPLLNRFQL VFYLSLSSTR PDEGLASIIC DQLLEKEGSV TEMCVRNIIQ QLKNQVLFLL DDYKEICSIP QVIGKLIQKN HLSRTCLLIA VRTNRARDIR RYLETILEIK AFPFYNTVCI LRKLFSHNMT RLRKFMVYFG KNQSLQKIQK TPLFVAAICA HWFQYPFDPS FDDVAVFKSY MERLSLRNKA TAEILKATVS SCGELALKGF FSCCFEFNDD DLAEAGVDED EDLTMCLMSK

FTAQRLRPFY RFLSPAFQEF LAGMRLIELL DSDRQEHQDL GLYHLKQINS PMMTVSAYNN FLNYVSSLPS TKAGPKIVSH LLHLVDNKES LENISENDDY LKHQPEISLQ MQLLRGLWQI CPQAYFSMVS EHLLVLALKT AYQSNTVAAC SPFVLQFLQG RTLTLGALNL QYFFDHPESL SLLRSIHFPI RGNKTSPRAH FSVLETCFDK SQVPTIDQDY ASAFEPMNEW ERNLAEKEDN VKSYMDMQRR ASPDLSTGYW KLSPKQYKIP CLEVDVNDID VVGQDMLEIL MTVFSASQRI ELHLNHSRGF IESIRPALEL SKASVTKCSI SKLELSAAEQ ELLLTLPSLE SLEVSGTIQS QDQIFPNLDK FLCLKELSVD LEGNINVFSV IPEEFPNFHH MEKLLIQISA EYDPSKLVKL IQNSPNLHVF HLKCNFFSDF GSLMTMLVSC KKLTEIKFSD SFFQAVPFVA SLPNFISLKI LNLEGQQFPD EETSEKFAYI LGSLSNLEEL ILPTGDGIYR VAKLIIQQCQ QLHCLRVLSF FKTLNDDSVV EIAKVAISGG FQKLENLKLS INHKITEEGY RNFFQALDNM PNLQELDISR HFTECIKAQA TTVKSLSQCV LRLPRLIRLN MLSWLLDADD IALLNVMKER HPQSKYLTIL QKWILPFSPI IQK

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

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human NAIP 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 receival 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.

Product Details

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.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	NAIP
Alternative Name:	NAIP (NAIP Products)
Background:	Anti-apoptotic protein which acts by inhibiting the activities of CASP3, CASP7 and CASP9. Can inhibit the autocleavage of pro-CASP9 and cleavage of pro-CASP3 by CASP9. Capable of inhibiting CASP9 autoproteolysis at 'Asp-315' and decreasing the rate of auto proteolysis at 'Asp-330'. Acts as a mediator of neuronal survival in pathological conditions. Prevents motor-neuron apoptosis induced by a variety of signals. Possible role in the prevention of spinal muscular atrophy that seems to be caused by inappropriate persistence of motor-neuron apoptosis: mutated or deleted forms of NAIP have been found in individuals with severe spinal muscular atrophy., Acts as a sensor component of the NLRC4 inflammasome that specifically recognizes and binds needle protein CprI from pathogenic bacteria C.violaceum. Association of pathogenic bacteria proteins drives in turn drive assembly and activation of the NLRC4 inflammasome, promoting caspase-1 activation, cytokine production and macrophage pyroptosis. The NLRC4 inflammasome is activated as part of the innate immune response to a range of intracellular bacteria such as C.violaceum and L.pneumophila.
Molecular Weight:	160.5 kDa Including tag.
UniProt:	Q13075
Pathways:	Apoptosis, Inflammasome

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 gurantee though.
Comment:	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

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value 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:	Unlimited (if stored properly)

Images

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