

Datasheet for ABIN3134596

PAFAH1B1 Protein (AA 1-410) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	PAFAH1B1
Protein Characteristics:	AA 1-410
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PAFAH1B1 protein is labelled with His tag.
Application:	ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS)

Product Details

Sequence: MVLSQRQRDE LNRAIADYLR SNGYEEAYSV FKKEAELDMN EELDKKYAGL LEKKWTSVIR
LQKKVMELES KLNEAKEEFT SGGPLGQKRD PKEWIPRPPE KYALSGHRSP VTRVIFHPVF
SVMVSASEDA TIKVWDYETG DFERTLKGHT DSVQDISFDH SGKLLASCSA DMTIKLWDFQ
GFECIRTMHG HDHNVSSVAI MPNGDHIVSA SRDKTIKMWE VQTGYCVKTF TGHREWVRMV
RPNQDGLIA SCSNDQTVRV WVVATKECKA ELREHEHVVE CISWAPESSY SSISEATGSE
TKKSGKPGPF LLSGSRDKTI KMWDVSTGMC LMTLVGHDNW VRGVLFHSGG KFILSCADDK
TLRVWDYKNK RCMKTLNAHE HFVTSLDFHK TAPYVVTGSV DQTVKVWECR

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.
 - Mouse Pafah1b1 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.

Product Details

- 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.

Purification:	Two step purification of proteins expressed in baculovirus infected SF9 insect cells: <ol style="list-style-type: none">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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Sterility:	0.22 µm filtered
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Endotoxin Level:	Protein is endotoxin free.
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Grade:	Crystallography grade
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Target Details

Target:	PAFAH1B1
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Alternative Name:	Pafah1b1 (PAFAH1B1 Products)
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Target Details

Background: Positively regulates the activity of the minus-end directed microtubule motor protein dynein. May enhance dynein-mediated microtubule sliding by targeting dynein to the microtubule plus end. Required for several dynein- and microtubule-dependent processes such as the maintenance of Golgi integrity, the peripheral transport of microtubule fragments and the coupling of the nucleus and centrosome. Required during brain development for the proliferation of neuronal precursors and the migration of newly formed neurons from the ventricular/subventricular zone toward the cortical plate. Neuronal migration involves a process called nucleokinesis, whereby migrating cells extend an anterior process into which the nucleus subsequently translocates. During nucleokinesis dynein at the nuclear surface may translocate the nucleus towards the centrosome by exerting force on centrosomal microtubules. Also required for proper activation of Rho GTPases and actin polymerization at the leading edge of locomoting cerebellar neurons and postmigratory hippocampal neurons in response to calcium influx triggered via NMDA receptors. May also play a role in other forms of cell locomotion including the migration of fibroblasts during wound healing. Non-catalytic subunit of an acetylhydrolase complex which inactivates platelet-activating factor (PAF) by removing the acetyl group at the SN-2 position. {ECO:0000255|HAMAP-Rule:MF_03141, ECO:0000269|PubMed:11056530, ECO:0000269|PubMed:11344260, ECO:0000269|PubMed:12796778, ECO:0000269|PubMed:12911752, ECO:0000269|PubMed:14507966, ECO:0000269|PubMed:14578885, ECO:0000269|PubMed:14691133, ECO:0000269|PubMed:15173193, ECO:0000269|PubMed:15473966, ECO:0000269|PubMed:16107726, ECO:0000269|PubMed:16203747, ECO:0000269|PubMed:16369480, ECO:0000269|PubMed:16481446}.

Molecular Weight: 47.6 kDa Including tag.

UniProt: [P63005](#)

Pathways: [M Phase, Regulation of Cell Size](#)

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.

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

Application Details

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