

Datasheet for ABIN3136334
PAK7 Protein (AA 1-719) (His tag)



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1 Image

Overview

Quantity:	1 mg
Target:	PAK7
Protein Characteristics:	AA 1-719
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PAK7 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), ELISA, Crystallization (Crys), Western Blotting (WB)

Product Details

Sequence: MFGKKKKKIE ISGPSNFEHR VHTGFDPQEQ KFTGLPQQWH SLLADTANRP KPMVDPSCIT
 PIQLAPMKTI VRGNKCKET SINGLLEDFD NISVTRSNSL RKESPPTDQ GAASRIQGH
 EENGFITFSQ YSSESDTTAD YTEKYRDRS LYGDLDL DLYY KSSHAAKQNG HAMKMKHGDA
 YYPEMKS LKT DLAGFPVDYH THLDSL R KSS EYGD LRWDYQ RASSSSPLDY SFQLTPSR TA
 GTSRCSKESL AYSESDWGPS LDDYDRRPKS SYLHQTSPQP AMRQRSKSGS GLQEPMMPF G
 ASAFKTHPQG HSYNSYTYPR LSEPTMCIPK VDYDRAQMV F SPPLSGSDTY PRGPTKLPQS
 QSKAGYSSGS HQYPSGYHKA SLYHHP SLQT SSQYISTASY LSSLSISSST YPPPSWGSSS
 DQQPSRVSHE QFRAALQLV V SPGDPREYLD NFIKIGEGST GIVCIATEKH TGKQVAVKKM
 DLRKQQRREL LFNEVVIMRD YHHDNVDMY NSYLVGDELW VMEFLEGGA LTDIVTHTRM
 NEEQIATVCL SVLKALSYLH NQGV IHRDIK SDSILLTSDG RIKLSDFGFC AQSKEV PKR
 KSLVGTPYWM APEVISRLPY GTEVDIWSLG IMVIEMIDGE PPYFNEPPLQ AMRRIRDSL P
 PRVKDLHKVS SMLRGFLDLM LVREPSQRAT AQELLGHPFL KLAGPPSCIV PLMRQYRHH

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 Pak7 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.

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.

Sterility:

0.22 µm filtered

Endotoxin Level:

Protein is endotoxin free.

Grade:

Crystallography grade

Target Details

Target:	PAK7
Alternative Name:	Pak7 (PAK7 Products)
Background:	Serine/threonine protein kinase that plays a role in a variety of different signaling pathways including cytoskeleton regulation, cell migration, proliferation or cell survival. Activation by various effectors including growth factor receptors or active CDC42 and RAC1 results in a conformational change and a subsequent autophosphorylation on several serine and/or threonine residues. Phosphorylates the proto-oncogene RAF1 and stimulates its kinase activity. Promotes cell survival by phosphorylating the BCL2 antagonist of cell death BAD. Phosphorylates CTNND1, probably to regulate cytoskeletal organization and cell morphology. Keeps microtubules stable through MARK2 inhibition and destabilizes the F-actin network leading to the disappearance of stress fibers and focal adhesions (By similarity). {ECO:0000250, ECO:0000269 PubMed:11756552}.
Molecular Weight:	81.9 kDa Including tag.
UniProt:	Q8C015

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 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.

Handling

Expiry Date: Unlimited (if stored properly)

Images



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