

Datasheet for ABIN3136334

PAK7 Protein (AA 1-719) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	PAK7
Protein Characteristics:	AA 1-719
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PAK7 protein is labelled with Strep Tag.
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Brand:	AliCE®
Sequence:	<p>MFGKKKKKIE ISGPSNFEHR VHTGFDPQEQ KFTGLPQQWH SLLADTANRP KPMVDPSCIT</p> <p>PIQLAPMKTI VRGNKCKET SINGLLEDFD NISVTRSNSL RKESPPTPDQ GAASRIQGHS</p> <p>EENGFITFSQ YSSESDTTAD YTEKYRDRS LYGDDLDDLY KSSHAQKNG HAMKMKHGDA</p> <p>YYPEMKSLKT DLAGFPVDYH THLDSLRSKSS EYGDLRWYQ RASSSSPLDY SFQLTPSRTA</p> <p>GTSRCSKESL AYSESDWGPS LDDYDRRPS SYLHQTSPQP AMRQRSKSGS GLQEPMPFPG</p> <p>ASAFKTHPQG HSYNSYTYPR LSEPTMCIPK VDYDRAQMV SPPLSGSDTY PRGPTKLPQS</p> <p>QSKAGYSSGS HQYPSGYHKA SLYHHPQLT SSQYISTASY LSSLSISSST YPPPSWGSSS</p> <p>DQQPSRVSH QFRAALQLVV SPGDPREYLD NFIKIGEGST GIVCIATEKH TGKQVAVKKM</p> <p>DLRKQQRREL LFNEVVIMRD YHHDNVDMY NSYLVGDELW VMEFLEGGA LTDIVTHTRM</p> <p>NEEQIATVCL SVLKALSYLH NQGVHHRDIK SDSILLTSDG RIKLSDFGFC AQVSKEVPKR</p> <p>KSLVGTPYWM APEVISRLPY GTEVDIWSLG IMVIEMIDGE PPYFNEPPLQ AMRRIRDSL</p>

PRVKDLHKVS SMLRGFLDLM LVREPSQRAT AQELLGHPFL KLAGPPSCIV PLMRQYRHH

Sequence without tag. The proposed Strep-Tag is based on experience s 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:

Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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 try to ensure that you receive soluble 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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

Product Details

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

Target Details

Target: PAK7

Alternative Name: Pak5 ([PAK7 Products](#))

Background: Serine/threonine-protein kinase PAK 5 (EC 2.7.11.1) (p21-activated kinase 5) (PAK-5) (p21-activated kinase 7) (PAK-7),FUNCTION: 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: 80.9 kDa

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: ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.

During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's

Application Details

	needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months