

# Datasheet for ABIN7564425 **PAK4 Protein (AA 1-593) (His tag)**



### Overview

Quantity:	1 mg
Target:	PAK4
Protein Characteristics:	AA 1-593
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PAK4 protein is labelled with His tag.

#### **Product Details**

1 Toddet Details	
Purpose:	Custom-made recombinant Pak4 Protein expressed in mammalian cells.
Sequence:	MFGKKKKRVE ISAPSNFEHR VHTGFDQHEQ KFTGLPRQWQ SLIEESARRP KPLIDPACIT
	SIQPGAPKTI VRGSKGAKDG ALTLLLDEFE NMSVTRSNSL RRESPPPPAR AHQENGMLEE
	RAAPARMAPD KAGSRARATG HSEAGSGSGD RRRVGPEKRP KSSRDGPGGP QEASRDKRPL
	SGPDVSTPQP GSLTSGTKLA AGRPFNTYPR ADTDHPPRGA QGEPHTMAPN GPSATGLAAP
	QSSSSSRPPT RARGAPSPGV LGPHASEPQL APPARALAAP AVPPAPGPPG PRSPQREPQR
	VSHEQFRAAL QLVVDPGDPR SYLDNFIKIG EGSTGIVCIA TVRSSGKLVA VKKMDLRKQQ
	RRELLFNEVV IMRDYRHENV VEMYNSYLVG DELWVVMEFL EGGALTDIVT HTRMNEEQIA
	AVCLAVLQAL AVLHAQGVIH RDIKSDSILL THDGRVKLSD FGFCAQVSKE VPRRKSLVGT
	PYWMAPELIS RLPYGPEVDI WSLGVMVIEM VDGEPPYFNE PPLKAMKMIR DNLPPRLKNL
	HKASPSLKGF LDRLLVRDPA QRATAAELLK HPFLTKAGPP ASIVPLMRQH RTR <b>Sequence</b>
	without tag. The proposed Purification-Tag is based on experiences with the expression
	system, a different complexity of the protein could make another tag necessary. In case you

#### **Product Details**

	have a special request, please contact us.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:
	<ul> <li>Made to order protein - from design to production - by highly experienced protein experts.</li> <li>Protein expressed in mammalian cells and purified in one-step affinity chromatography</li> <li>The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.</li> </ul>
	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.
	If you are not interested in a full length protein, please contact us for individual protein fragments.
	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.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC
Grade:	custom-made
Target Details	
Target:	PAK4
Alternative Name:	Pak4 (PAK4 Products)
Background:	Serine/threonine-protein kinase PAK 4 (EC 2.7.11.1) (p21-activated kinase 4) (PAK-
	4),FUNCTION: Serine/threonine protein kinase that plays a role in a variety of different signaling
	pathways including cytoskeleton regulation, cell migration, growth, 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 and inactivates the protein phosphatase SSH1,
	leading to increased inhibitory phosphorylation of the actin binding/depolymerizing factor
	cofilin. Decreased cofilin activity may lead to stabilization of actin filaments. Phosphorylates

LIMK1, a kinase that also inhibits the activity of cofilin. Phosphorylates integrin beta5/ITGB5

and thus regulates cell motility. Phosphorylates ARHGEF2 and activates the downstream target

#### **Target Details**

RHOA that plays a role in the regulation of assembly of focal adhesions and actin stress fibers. Stimulates cell survival by phosphorylating the BCL2 antagonist of cell death BAD. Alternatively, inhibits apoptosis by preventing caspase-8 binding to death domain receptors in a kinase independent manner. Plays a role in cell-cycle progression by controlling levels of the cell-cycle regulatory protein CDKN1A and by phosphorylating RAN. {ECO:0000269|PubMed:11413130, ECO:0000269|PubMed:21381077}.

Molecular Weight:	64.6 kDa
UniProt:	Q8BTW9
Pathways:	RTK Signaling

### **Application Details**

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for
	functional studies yet we cannot offer a guarantee though.

## Restrictions: For Research Use only

### Handling

Format:	Liquid
Buffer:	The buffer composition 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:	12 months