

Datasheet for ABIN7554836 **PAK4 Protein (AA 1-591) (His tag)**



Overview

Quantity:	1 mg
Target:	PAK4
Protein Characteristics:	AA 1-591
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PAK4 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant PAK4 Protein expressed in mammalian cells.
Sequence:	MFGKRKKRVE ISAPSNFEHR VHTGFDQHEQ KFTGLPRQWQ SLIEESARRP KPLVDPACIT
	SIQPGAPKTI VRGSKGAKDG ALTLLLDEFE NMSVTRSNSL RRDSPPPPAR ARQENGMPEE
	PATTARGGPG KAGSRGRFAG HSEAGGGSGD RRRAGPEKRP KSSREGSGGP QESSRDKRPL
	SGPDVGTPQP AGLASGAKLA AGRPFNTYPR ADTDHPSRGA QGEPHDVAPN GPSAGGLAIP
	QSSSSSRPP TRARGAPSPG VLGPHASEPQ LAPPACTPAA PAVPGPPGPR SPQREPQRVS
	HEQFRAALQL VVDPGDPRSY LDNFIKIGEG STGIVCIATV RSSGKLVAVK KMDLRKQQRR
	ELLFNEVVIM RDYQHENVVE MYNSYLVGDE LWVVMEFLEG GALTDIVTHT RMNEEQIAAV
	CLAVLQALSV LHAQGVIHRD IKSDSILLTH DGRVKLSDFG FCAQVSKEVP RRKSLVGTPY
	WMAPELISRL PYGPEVDIWS LGIMVIEMVD GEPPYFNEPP LKAMKMIRDN LPPRLKNLHK
	VSPSLKGFLD RLLVRDPAQR ATAAELLKHP FLAKAGPPAS IVPLMRQNRT R Sequence 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 have a

Product Details

	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:
	 Made to order protein - from design to production - by highly experienced protein experts. Protein expressed in mammalian cells and purified in one-step affinity chromatography The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
	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

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:11278822, ECO:0000269|PubMed:11313478, ECO:0000269|PubMed:14560027, ECO:0000269|PubMed:15660133, ECO:0000269|PubMed:20507994, ECO:0000269|PubMed:20631255, ECO:0000269|PubMed:20805321,

ECO:0000269|PubMed:26607847}.

Molecular Weight: 64.1 kDa

UniProt: 096013

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