Datasheet for ABIN7563896

PAK3 Protein (PAK3) (AA 1-559) (His tag)

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Overview

Quantity:	1 mg
Target:	PAK3
Protein Characteristics:	AA 1-559
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PAK3 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Pak3 Protein expressed in mammalian cells.
Sequence:	MSDSLDNEEK PPAPPLRMNS NNRDSSALNH SSKPLPMAPE EKNKKARLRS IFPGGGDKTN KKKEKERPEI SLPSDFEHTI HVGFDAVTGE FTPDLYGSQM CPGKLPEGIP EQWARLLQTS NITKLEQKKN PQAVLDVLKF YDSKETVNNQ KYMSFTSGDK SAHGYIAAHQ SNTKTASEPP LAPPVSEEED EEEEEEEDDN EPPPVIAPRP EHTKSIYTRS VVESIASPAA PNKEDIPPSA ENANSTTLYR NTDRQRKKSK MTDEEILEKL RSIVSVGDPK KKYTRFEKIG QGASGTVYTA LDIATGQEVA IKQMNLQQQP KKELIINEIL VMRENKNPNI VNYLDSYLVG DELWVVMEYL AGGSLTDVVT ETCMDEGQIA AVCRECLQAL DFLHSNQVIH RDIKSDNILL GMDGSVKLTD FGFCAQITPE QSKRSTMVGT PYWMAPEVVT RKAYGPKVDI WSLGIMAIEM VEGEPPYLNE NPLRALYLIA TNGTPELQNP ERLSAVFRDF LNRCLEMDVD RRGSAKELLQ HPFLKLAKPL SSLTPLIIAA KEAIKNSSR **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 special request, please contact us.**

Product Details

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:	PAK3
Alternative Name:	Pak3 (PAK3 Products)
Background:	Serine/threonine-protein kinase PAK 3 (EC 2.7.11.1) (Beta-PAK) (CDC42/RAC effector kinase PAK-B) (p21-activated kinase 3) (PAK-3),FUNCTION: Serine/threonine protein kinase that plays a role in a variety of different signaling pathways including cytoskeleton regulation, cell migration, or cell cycle regulation. Plays a role in dendrite spine morphogenesis as well as synapse formation and plasticity (PubMed:25851601). Acts as a downstream effector of the small GTPases CDC42 and RAC1. Activation by the binding of active CDC42 and RAC1 results in a conformational change and a subsequent autophosphorylation on several serine and/or threonine residues. Phosphorylates MAPK4 and MAPK6 and activates the downstream target MAPKAPK5, a regulator of F-actin polymerization and cell migration. Additionally, phosphorylates TNNI3/troponin I to modulate calcium sensitivity and relaxation kinetics of thin myofilaments. May also be involved in early neuronal development. In hippocampal neurons,

Target Details

	necessary for the formation of dendritic spines and excitatory synapses, this function is dependent on kinase activity and may be exerted by the regulation of actomyosin contractility through the phosphorylation of myosin II regulatory light chain (MLC) (PubMed:15800193). {ECO:0000269|PubMed:12242269, ECO:0000269|PubMed:15574732, ECO:0000269|PubMed:15800193, ECO:0000269|PubMed:17537723, ECO:0000269|PubMed:20540949, ECO:0000269|PubMed:25851601}.
Molecular Weight:	62.4 kDa
UniProt:	Q61036

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