ARG42665
anti-PAK3 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PAK3
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-P, WB
Specificity	ARG42665 anti-PAK3 antibody reacts to PAK1 with low binding affinity and not react to PAK2.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PAK3
Species	Human
Immunogen	Synthetic peptide within aa. 1-50 of Human PAK3.
Conjugation	Un-conjugated
Alternate Names	beta-PAK; bPAK; MRX30; PAK3beta; OPHN3; Oligophrenin-3; MRX47; Serine/threonine-protein kinase PAK 3; EC 2.7.11.1; PAK-3; p21-activated kinase 3; Beta-PAK

Application Instructions

Application table

Application	Dilution
IHC-P	1:50 - 1:200
WB	1:1000 - 1:5000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	Human fetal brain
Observed Size	~ 60 kDa

Properties

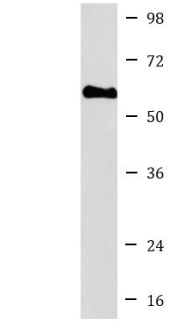
Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	PAK3
Gene Full Name	p21 protein (Cdc42/Rac)-activated kinase 3
Background	The protein encoded by this gene is a serine-threonine kinase and forms an activated complex with GTP-bound RAS-like (P21), CDC2 and RAC1. This protein may be necessary for dendritic development and for the rapid cytoskeletal reorganization in dendritic spines associated with synaptic plasticity. Defects in this gene are the cause of a non-syndromic form of X-linked intellectual disability. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2017]
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. Acts as 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. [UniProt]
Calculated Mw	62 kDa
PTM	Autophosphorylated when activated by CDC42/p21. Neddylated. [UniProt]
Cellular Localization	Cytoplasm. [UniProt]

Images



Human fetal brain

ARG42665 anti-PAK3 antibody WB image

Western blot: Human fetal brain lysate stained with ARG42665 anti-PAK3 antibody.