

Datasheet: VPA00083KT

Description:	PAK2 ANTIBODY WITH CONTROL LYSATE
Specificity:	PAK2
Other names:	p21 Activated Kinase 2
Format:	Purified
Product Type:	PrecisionAb Polyclonal
Isotype:	Polyclonal IgG
Quantity:	2 Westerns

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	-			1/1000

PrecisionAb antibodies have been extensively <u>validated for the western blot</u> <u>application.</u> The antibody has been validated at the suggested dilution. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependant on sample type.

Target Species	Human			
Product Form	Purified IgG - liquid			
Preparation	20μl Rabbit polyclonal antibody purified by affinity chromatography			
Buffer Solution	Phosphate buffered saline			
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)			
Immunogen	14 amino acid peptide sequence near the carboxy terminus of human PAK2.			
External Database Links	UniProt:			
	Q13177 Related reagents			

Entrez Gene:

5062 PAK2 Related reagents

Specificity

Rabbit anti Human PAK2 antibody recognizes p21-activated kinase-2 (PAK2), a ubiquitously expressed, serine/threonine protease found at higher levels in skeletal muscle, ovary, thymus and spleen.

p21-activated kinases (PAKs) bind activated Cdc42 and Rac via a Cdc42/Rac interactive binding (CRIB) domain. Group 1 PAK kinases (PAK1, 2 and 3) regulate the activity of an adjacent conserved autoinhibitory domain and are associated with cellular processes, including cytoskeleton rearrangement, apoptosis and MAP kinase signalling. Group 2 PAKs (PAK4, 5, and 6) lack the autoinhibitory domain and are not activated by Cdc42/Rac binding.

PAK2 has a cytostatic effect on cells and is activated in response to cellular stresses such hyperosmolarity, serum starvation, contact inhibition and DNA damage from radiation and chemicals. Unlike other PAKs, PAK2 can be activated by proteolytic cleavage to generate a constitutively active fragment, PAK2p34, which induces a cell death response. This induction is thought to be regulated by Rho GTPase-activating protein 10 which inhibits the protein kinase activity of PAK2p34 and causes it to localise to the perinuclear region instead of the nucleus. PAK2 may also play a role in X-linked mental retardation.

Rabbit anti Human PAK2 antibody detects p21-activated kinase-2 as a single a band of 58 kDa in a range of human cell line lysates.

Western Blotting

Rabbit anti PAK2 detects a band of approximately 58 kDa in MCF7 cell lysates.

Instructions For Use

Please refer to the PrecisionAb western blotting protocol. For additional information on secondary antibody dilution and exposure time see product web page.

Lysate Composition

400µg MCF7 lysate lyophilized in RIPA buffer.

- Lysate Reconstitution If using DDT reconstitute the lyophilized lysate with 190µl DI H₂O, add 200µl 2x Laemmli Sample Buffer and 10µl 2M DTT.
 - If using BME reconstitute the lyophilized lysate with 180µl DI H₂O, add 200µl 2x Laemmli Sample Buffer and 20µl BME.

Heat at 95°C for 5 minutes. For 10 well mini gels load 25µl. For other gel and comb formats please refer to the PrecisionAb western blotting protocol.

Storage

Antibody: Store undiluted at -20°C, avoiding repeated freeze thaw cycles.

Lysate: Store lyophilized lysate at -20°C. After reconstitution aliquot and store at -20°C for up to 3 months or at -80°C for longer term storage.

Guarantee

As supplied, 12 months from date of despatch.

Acknowledgements

PrecisionAb™ is a trademark of Bio-Rad Laboratories.

Health And Safety Information

Material Safety Datasheet documentation #10040 #10561 available at:

Antibody (10040): https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf

Lysate Material (10561): https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rabbit IgG (H/L) (STAR208...) HRP

America

North & South Tel: +1 800 265 7376 Fax: +1 919 878 3751 Worldwide

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From March 15, 2021, we will no longer supply printed datasheets with our products. Look out for updates on how to access your digital version at bio-rad-antibodies.com 'M351354:190318'

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