

# Datasheet: VPA00749KT

Description:	CDK4 ANTIBODY WITH CONTROL LYSATE		
Specificity:	CDK4		
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 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 on immunogen				
Buffer Solution	Phosphate buffered saline				
Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> ) 2% Sucrose				
Immunogen	Synthetic peptide encompassing the center region of human CDK4				
External Database Links	UniProt: P11802 Related reagents  Entrez Gene: 1019 CDK4 Related reagents				

### **Specificity**

**Rabbit anti Human CDK4 antibody** recognizes cyclin-dependent kinase 4, also known as cell division protein kinase 4.

The protein encoded by CDK4 is a member of the Ser/Thr protein kinase family. This protein is highly similar to the gene products of *S. cerevisiae* cdc28 and *S. pombe* cdc2. It is a catalytic

subunit of the protein kinase complex that is important for cell cycle G1 phase progression. The activity of this kinase is restricted to the G1-S phase, which is controlled by the regulatory subunits D-type cyclins and CDK inhibitor p16(INK4a). This kinase was shown to be responsible for the phosphorylation of retinoblastoma gene product (Rb). Mutations in CDK4 as well as in its related proteins including D-type cyclins, p16(INK4a) and Rb were all found to be associated with tumorigenesis of a variety of cancers. Multiple polyadenylation sites of CDK4 have been reported (provided by RefSeq, Jul 2008).

Rabbit anti Human CDK4 antibody detects a band of 30 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.

Western Blotting	Anti CDK4 antibody recognizes a band of approximately 30 kDa in HEK293 cell lysates
Instructions For Use	Please refer to the <u>PrecisionAb western blotting protocol.</u> For additional information on secondary antibody dilution and exposure time see product web page.
Lysate Composition	400μg HEK293 lysate lyophilized in RIPA buffer
Lysate Reconstitution	- If using DDT reconstitute the lyophilized lysate with 190 $\mu$ l DI H <sub>2</sub> O, add 200 $\mu$ l 2x Laemmli Sample Buffer and 10 $\mu$ l 2M DTT.
	- If using BME reconstitute the lyophilized lysate with 180 $\mu$ l DI H $_2$ O, add 200 $\mu$ l 2x Laemmli Sample Buffer and 20 $\mu$ l 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 #10045 #10561 available at: Antibody (10045): <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10045.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10045.pdf</a> Lysate Material (10561): <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf</a>
Regulatory	For research purposes only

# Related Products

#### **Recommended Secondary Antibodies**

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

North & South Tel: +1 800 265 7376

America

Fax: +1 919 878 3751

Worldwide

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