

Datasheet: VMA00520KT

Description:	CDK4 ANTIBODY WITH CONTROL LYSATE
Specificity:	CDK4
Format:	Purified
Product Type:	PrecisionAb™ Monoclonal
Isotype:	IgG2a
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 [validated for the western blot application](#). 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 Mouse monoclonal antibody purified by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Immunogen	Mouse-derived recombinant protein of human CDK4
External Database Links	<p>UniProt: P11802 Related reagents</p> <p>Entrez Gene: 1019 CDK4 Related reagents</p>
Specificity	<p>Mouse anti Human CDK4 antibody recognizes the cyclin-dependent kinase 4, also known as cell division protein kinase 4.</p> <p>The protein encoded by CDK4 gene is a member of the Ser/Thr protein kinase family. This protein</p>

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).

Mouse 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 detects a band of approximately 30 kDa in HEK293 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 HEK293 lysate lyophilized in RIPA buffer
Lysate Reconstitution	<p>- If using DDT reconstitute the lyophilized lysate with 190µl DI H₂O, add 200µl 2x Laemmli Sample Buffer and 10µl 2M DTT.</p> <p>- If using BME reconstitute the lyophilized lysate with 180µl DI H₂O, add 200µl 2x Laemmli Sample Buffer and 20µl BME.</p> <p>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.</p>
Storage	<p>Antibody: Store undiluted at -20°C, avoiding repeated freeze thaw cycles.</p> <p>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.</p>
Shelf Life	As supplied, 12 months from date of despatch.
Acknowledgements	PrecisionAb™ is a trademark of Bio-Rad Laboratories.
Health And Safety Information	<p>Material Safety Datasheet documentation #10040 #10561 available at:</p> <p>Antibody (10040): https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</p> <p>Lysate Material (10561): https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf</p>
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (H/L) (STAR207...) [HRP](#)

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

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