

# Datasheet: VMA00513KT

Description:	ACTIN ALPHA 2 ANTIBODY WITH CONTROL LYSATE		
Specificity:	ACTIN ALPHA 2		
Format:	Purified		
Product Type:	PrecisionAb Monoclonal		
Isotype:	lgG2b		
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 <u>www.bio-rad-antibodies.com/protocols</u> .					
	Western Blotting	•			1/1000	
	<b>PrecisionAb antibodies</b> <b>application.</b> The antibod product has not been tes exclude its use in such p sample type.	dy has bee sted for us	en validat se in a pai	ed at the suggested di rticular technique this c	lution. Where this loes not necessarily	
Target Species	Human					
Species Cross Reactivity	Reacts with: Mouse, Rat <b>N.B.</b> Antibody reactivity a reactivity is derived from personal communication further information.	and worki testing w	ithin our la	aboratories, peer-revie	wed publications or	
Product Form	Purified IgG - liquid					
Preparation	20µl Mouse monoclonal tissue culture supernatar		purified by	y affinity chromatograp	hy on Protein G from	
Buffer Solution	Phosphate buffered salir	ne				
Preservative Stabilisers	0.09% Sodium Azide (Na	aN <sub>3</sub> )				

Immunogen	<i>E. coli</i> derived recombinant protein corresponding to amino acids 1-377 of human actin alpha 2		
External Database Links	UniProt: <u>P62736</u> <u>Related reagents</u> Entrez Gene: <u>59</u> ACTA2 <u>Related reagents</u>		
Synonyms	ACTSA, ACTVS		
Specificity	Mouse anti Human actin alpha 2 antibody recognizes actin alpha 2 also known as alpha-cardiac actin, aortic smooth muscle actin or cell growth-inhibiting gene 46 protein. The protein encoded by ACTA2 gene belongs to the actin family of proteins, which are highly conserved proteins that play a role in cell motility, structure and integrity. Alpha, beta and gamma actin isoforms have been identified, with alpha actins being a major constituent of the contractile apparatus, while beta and gamma actins are involved in the regulation of cell motility. This actin is an alpha actin that is found in skeletal muscle. Defects in ACTA2 gene cause aortic aneurysm familial thoracic type 6 (AAT6). Multiple alternatively spliced variants, encoding the same protein, have been identified (provided by RefSeq, Nov 2008). Mouse anti Human actin alpha 2 antibody detects a band of 42 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.		
Western Blotting	Anti actin alpha 2 detects a band of approximately 42 kDa in HeLa cell lysate		
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 HeLa lysate lyophilized in RIPA buffer.		
Lysate Reconstitution	<ul> <li>If using DDT reconstitute the lyophilized lysate with 190µl DI H<sub>2</sub>O, add 200µl 2x Laemmli Sample Buffer and 10µl 2M DTT.</li> <li>If using BME reconstitute the lyophilized lysate with 180µl DI H<sub>2</sub>O, add 200µl 2x Laemmli Sample Buffer and 20µl BME.</li> <li>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.</li> </ul>		
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 <sup>™</sup> is a trademark of Bio-Rad Laboratories.
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Health And Safety	Material Safety Datasheet documentation #10040 #10561 available at:
Information	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 Mouse IgG (H/L) (STAR207...) HRP

#### **Recommended Negative Controls**

#### MOUSE IgG2b NEGATIVE CONTROL (MCA691)

North & South	Tel: +1 800 265 7376	Worldwide
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