

Datasheet: VMA00014KT

Description:	ACTIN BETA ANTIBODY WITH CONTROL LYSATE
Specificity:	ACTIN BETA
Other names:	ACTB
Format:	Purified
Product Type:	PrecisionAb™ Monoclonal
Isotype:	HuCAL Fab bivalent
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

Species Cross Reactivity

Reacts with: Mouse, Rat

N.B. Antibody reactivity and working conditions may vary between species.

Product Form

A bivalent human recombinant Fab selected from the HuCAL® GOLD phage display library, expressed in *E. coli*. This Fab fragment is dimerized via a helix-turn-helix motif. The antibody is tagged with myc-tag (EQKLISEEDL) and a double extended Strep-tag at the C-terminus of the antibody heavy chain. This product is supplied as a liquid.

Preparation

20µl Recombinant human monoclonal antibody purified by Strep-Tactin affinity chromatography

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide (NaN₃)

Immunogen

Purified human beta actin

External Database Links

UniProt:

[P60709](#)

[Related reagents](#)

Entrez Gene:

[60](#) ACTB [Related reagents](#)

Specificity	<p>Human anti Human actin beta antibody recognizes the product of the ACTB gene, cytoplasmic actin beta, also known as actin cytoplasmic 1. Actin beta is ubiquitously expressed in all eukaryotic cells, playing a critical role in cell survival, motility and re-modelling.</p> <p>Actin beta is highly conserved throughout evolution, with all vertebrate and invertebrate species reviewed to date bearing a 98% or greater amino acid primary sequence identity to human actin beta. Plant species also exhibit a high degree of primary sequence conservation displaying considerable similarity to animal actin beta. For example, nearly 90% sequence identity is observed between the human ACTB and the model plant species <i>Arabidopsis thaliana</i> (mouse eared cress) ACT1 (Arabidopsis) gene products.</p> <p>Actin beta is a commonly used western blotting loading control for cell and tissue lysates across many species due to its ubiquitous expression and evolutionary conservation rendering antibodies against this target cross reactive with protein preparations from many different organisms.</p> <p>Human anti Human actin beta antibody recognizes human actin beta as a single band of ~42 kDa in multiple human and rodent cell line lysates by western blotting under reducing conditions.</p>
Western Blotting	Anti actin beta antibody detects a band of approximately 42 kDa in HeLa 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 HeLa 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	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

Mouse Anti Synthetic Peptide STREP-TAG CLASSIC (MCA2489...) [HRP](#)

Goat Anti Human IgG F(ab')₂ (STAR126...) [HRP](#)

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