

Datasheet: VMA00014

BATCH NUMBER 163852

Description:	HUMAN ANTI ACTIN BETA
Specificity:	ACTIN BETA
Other names:	ACTB
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	AbD12141
Isotype:	HuCAL Fab bivalent
Quantity:	100 µl

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

The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click [here](#) to learn how we validate our PrecisionAb range. 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 dependent on sample type.

Target Species

Human

Species Cross Reactivity

Reacts with: Mouse, Rat

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

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

Recombinant human monoclonal antibody purified by Strep-Tactin affinity chromatography

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 0.5 mg/ml
Immunogen	Purified human beta actin
External Database Links	<p>UniProt: P60709 Related reagents</p> <p>Entrez Gene: 60 ACTB Related reagents</p>
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 (<i>Arabidopsis</i>) 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.
Storage	<p>This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.</p> <p>Avoid repeated freezing and thawing as this may denature the protein. Storage in frost-free freezers is not recommended.</p>
Guarantee	12 months from date of despatch

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Health And Safety Information Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/VMA00014>
Antibody (10040)

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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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
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