

Datasheet: HCA147G

Description:	HUMAN ANTI HUMAN ACTIN BETA
Specificity:	ACTIN BETA
Other names:	ACTB
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD12141
Isotype:	HuCAL Fab bivalent
Quantity:	0.5 mg

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
Flow Cytometry			■	
Immunohistology - Frozen			■	
Immunohistology - Paraffin			■	
ELISA			■	
Immunoprecipitation			■	
Western Blotting	■			
Functional Assays			■	

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Human
Species Cross Reactivity	Reacts with: Mouse, Rat Based on sequence similarity, is expected to react with: Vertebrates, Invertebrates N.B. Antibody reactivity and working conditions may vary between species.
Product Form	A bivalent human recombinant Fab (lambda light chain) selected from the HuCAL® phage display library, expressed in <i>E. coli</i> . 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 antibody is supplied lyophilized.
Reconstitution	Reconstitute with 5.0 ml distilled water
Preparation	StrepTactin affinity chromatography
Buffer Solution	Phosphate buffered saline

Preservative	0.09% Sodium Azide (NaN ₃)
Stabilisers	1% Bovine Serum Albumin
Approx. Protein Concentrations	Ig concentration 0.1 mg/ml after reconstitution
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, clone AbD12141 recognizes the 42 kDa 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>
ELISA	Due to the presence of bovine serum albumin (BSA), this antibody is unsuitable for use as a capture reagent in sandwich ELISA applications. This product is also available without BSA, please enquire .
Western Blotting	HCA147G detects a band of approximately 42 kDa in HeLa cell lysates. HCA147G is suitable for use as a loading control.
Storage	<p>Prior to reconstitution store at +4°C.</p> <p>After reconstitution store at -20°C.</p> <p>Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
Shelf Life	12 months from date of reconstitution
Acknowledgements	Sold under license of U.S. Patents 6753136, 7785859 and 8273688 and corresponding patents. This antibody was developed by Bio-Rad, Zeppelinstr. 4, 82178 Puchheim, Germany.
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
Licensed Use	For in vitro research purposes only, unless otherwise specified in writing by Bio-Rad.

Regulatory For research purposes only

Technical Advice Recommended protocols and further information about HuCAL recombinant antibody technology can be found in the [HuCAL Antibodies Technical Manual](#)

Related Products

Recommended Secondary Antibodies

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

Mouse Anti Human C-MYC (MCA2200...)

[ALEXA FLUOR® 488](#), [ALEXA FLUOR® 647](#), [Alk. Phos.](#), [Biotin](#), [FITC](#), [HRP](#), [RPE](#)

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'M326340:180730'

Printed on 23 Oct 2018

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