

Datasheet: HCA147P

BATCH NUMBER 159100

Description:	HUMAN ANTI HUMAN ACTIN BETA:HRP
Specificity:	ACTIN BETA
Other names:	ACTB
Format:	HRP
Product Type:	Monoclonal Antibody
Clone:	AbD12141
Isotype:	HuCAL Fab bivalent
Quantity:	0.1 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	<p>Reacts with: Mouse, Rat</p> <p>Based on sequence similarity, is expected to react with: Vertebrates, Invertebrates</p> <p>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.</p>
Product Form	A bivalent human recombinant Fab (lambda light chain) selected from the HuCAL® 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 antibody is supplied conjugated to Horseradish Peroxidase (HRP) - liquid.

Preparation	StrepTactin affinity chromatography
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.01% Thiomersal
Approx. Protein Concentrations	Ig concentration 0.1 mg/ml
Immunogen	Purified human beta-actin
External Database Links	UniProt: P60709 Related reagents Entrez Gene: 60 ACTB Related reagents
RRID	AB_10964917
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 (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>
Western Blotting	HCA147P is suitable for use as a loading control
References	<ol style="list-style-type: none">Walsh, C.A. <i>et al.</i> (2020) The mevalonate precursor enzyme HMGCS1 is a novel marker and key mediator of cancer stem cell enrichment in luminal and basal models of breast cancer. PLoS One. 15 (7): e0236187.Lederhofer, J. <i>et al.</i> (2018) Development of a Virosomal RSV Vaccine Containing

Storage	This product is shipped frozen. When ready to use, thaw and aliquot the sample as needed. Store aliquots at -70°C, if available, otherwise store at -20°C. It is not recommended to keep aliquots at 4°C for more than one week.
Guarantee	12 months from date of despatch
Acknowledgements	Sold under license of U.S. Patents 7785859 and 8273688 and corresponding patents. This antibody was developed by Bio-Rad.
Health And Safety Information	Material Safety Datasheet documentation #10094 available at: https://www.bio-rad-antibodies.com/SDS/HCA147P 10094
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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
----------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------	------------------	-------------------------------------------------------------------------------------------------------------------------------------------------	---------------	-----------------------------------------------------------------------------------------------------------------------------------------------------

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M387729:210714'

Printed on 01 Mar 2024