

Datasheet: 12004164

Description:	ANTI-ACTIN hFAB™ RHODAMINE ANTIBODY
Specificity:	ACTIN
Format:	Rhodamine
Product Type:	Monoclonal Antibody
Clone:	AbD22606
Isotype:	HuCAL Fab monovalent
Quantity:	40 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	▪			1/1,000 - 1/10,000

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</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 monovalent human recombinant Fab selected from the HuCAL phage display library, expressed in <i>E. coli</i> . and purified using NiNTA affinity chromatography. This antibody is tagged with a DYKDDDDK tag and a HIS-tag (HHHHHH) at the C-terminus of the antibody heavy chain and conjugated to rhodamine - lyophilized
Reconstitution	Resuspend contents of the tube in the indicated volume of distilled or deionized water and leave on ice for at least 30 min prior to use. Brief centrifugation (pulse spin for 2-3 sec at maximum speed on a tabletop microcentrifuge) may be used to collect the contents at the bottom of the tube.

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Rhodamine	530	580
Buffer Solution	Phosphate buffered saline.		
Preservative	>80% Sucrose		
Stabilisers	<0.04% 2-Methyl-2H-Isothiazol-3-One		
	<10% bovine serum albumin		
External Database Links	UniProt: P60709 Related reagents Entrez Gene: 60 ACTB Related reagents		
Product Information	<p>hFAB Rhodamine Housekeeping Protein Fluorescent Primary Antibodies allow one-step detection of common housekeeping proteins like actin, tubulin, and GAPDH in your samples. These anti-actin, anti-tubulin, and anti-GAPDH antibodies are directly labeled with a rhodamine derivative (Exmax/Emmax = 530 nm/580 nm). The hFAB Rhodamine Antibodies were generated with Human Combinatorial Antibody Library (HuCAL®) Technology, providing exceptional specificity.</p> <p>These housekeeping protein antibodies can be used for protein normalization when the protein loading amounts are in the linear dynamic range. hFAB Rhodamine Antibodies can be imaged with the ChemiDoc MP Imaging System, and can be used in multiplex experiments with StarBright Blue 700 Secondary Antibodies as well as other traditional fluorescent antibodies, permitting detection of multiple target proteins and the housekeeping protein in a single blot.</p> <p>Features and Benefits</p> <p>Simple — No requirement for a secondary antibody; one-step detection of housekeeping proteins using highly cross-adsorbed antibodies for high specificity and sensitivity</p> <p>Versatile — Compatible with use of a wide range of other fluorophores including StarBright Blue 700 and DyLight 800 Fluorophores for multiplex western blotting</p> <p>Unique — HuCAL Technology eliminates cross-reactivity with primary/secondary antibodies from other species</p> <p>Diverse — Antibodies have been tested to detect human or mouse housekeeping proteins</p>		
Instructions For Use	Instructions for use can be found at www.bio-rad-antibodies.com/uploads/IFU/12004163.pdf		
References	<ol style="list-style-type: none"> Seo, T. <i>et al.</i> (2023) MARCH family E3 ubiquitin ligases selectively target and degrade cadherin family proteins. bioRxiv. Aug 10 [Epub ahead of print]. Ishiyama, R. <i>et al.</i> (2024) Production of infectious reporter murine norovirus by VP2 trans-complementation. J Virol. : e0126123. 		

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4. Hyder, U. *et al.* (2024) KAP1 negatively regulates RNA polymerase II elongation kinetics to activate signal-induced transcription [bioRxiv 5 May \[Preprint\]](#)
5. Todorova, M.N. *et al.* (2024) *Punica granatum* L. leaf extract enhances stress tolerance and promotes healthy longevity through HLH-30/TFEB, DAF16/FOXO, and SKN1/NRF2 crosstalk in *Caenorhabditis elegans*. [Phytomedicine. 134: 155971.](#)
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8. Picone, J.A. *et al.* (2024) The function of the ZFP189 transcription factor in the nucleus accumbens facilitates cocaine-specific transcriptional and behavioral adaptations. [Mol Psychiatry. Nov 25 \[Epub ahead of print\].](#)
9. Milstein, J.L. *et al.* (2025) Regulation of glial ApoE secretion by the mevalonate pathway is independent of ApoE isoform. [J Alzheimers Dis. 104 \(2\): 473-87.](#)

Storage

1 year at -20°C lyophilized; 6 months at +4°C after resuspension.
This product is photosensitive and should be protected from light
DO NOT FREEZE the solubilized material

Guarantee

Guaranteed until date of expiry. Please see product label.

Acknowledgements

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Health And Safety Information

Material Safety Datasheet documentation #12004163 available at:
<https://www.bio-rad-antibodies.com/SDS/12004164>
12004163
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<https://www.bio-rad-antibodies.com/uploads/MSDS/12004163.pdf>

Regulatory

For research purposes only

Related Products

Recommended Useful Reagents

[ANTI-TUBULIN hFAB™ RHODAMINE ANTIBODY \(12004165\)](#)
[ANTI-TUBULIN hFAB™ RHODAMINE ANTIBODY \(12004166\)](#)
[ANTI-GAPDH hFAB™ RHODAMINE ANTIBODY \(12004167\)](#)
[ANTI-GAPDH hFAB™ RHODAMINE ANTIBODY \(12004168\)](#)
[GOAT ANTI-MOUSE IgG StarBright™ Blue 700 \(12004158\)](#)
[GOAT ANTI-RABBIT IgG StarBright™ Blue 700 \(12004161\)](#)
[GOAT ANTI MOUSE IgG \(H/L\):DyLight®800 \(MULTI SPECIES ADSORBED\) \(STAR117D800GA\)](#)

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

'M407324:221007'

Printed on 20 May 2025

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