

# Datasheet: HCA005 BATCH NUMBER 150860

Description:	HUMAN ANTI CYCLOPHILIN A	
Specificity:	CYCLOPHILIN A	
Other names:	CYPA	
Format:	Purified	
<b>Product Type:</b>	Monoclonal Antibody	
Clone:	AbD00794	
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	NO	Not Determined	Suggested Dilution
ELISA	•			2ug/ml
Western Blotting	•			0.5ug/ml

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.

Species Cross
Reactivity

**Target Species** 

Human

Based on sequence similarity, is expected to react with:Bovine, Pig, Monkey **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 (lambda light chain) selected from the HuCAL® GOLD phage display library. Expressed in *E. coli* and purified using NiNTA affinity chromatography. This Fab fragment is dimerized via a helix-turn-helix motif. The antibody is tagged with a myc-tag (EQKLISEEDL) and a his-tag (HHHHHH) at the C-terminus of the antibody heavy chain.

#### Preparation

Metal-chelate affinity chromatography

Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> )		
Approx. Protein Concentrations	Antibody concentration 0.5 mg/ml		
Immunogen	Full length human recombinant cyclophilin A, amino acid residues 1-164, molecular weigh 17.9 kDa		
External Database			
Links	UniProt:		
	P62937 Related reagents		
	Entrez Gene:		
	5478 PPIA Related reagents		
Synonyms	CYPA		
RRID	AB_609613		
Specificity	<b>Human anti cyclophilin A antibody, clone AbD00794</b> recognizes cyclophilin A, also known as peptidyl-prolyl cis/trans isomerase A, PPIA or rotamase A. Cyclophilin A is a ~18 kDa, ubiquitously distributed intracellular protein that can be secreted by cells in response to inflammatory stimuli ( <u>Jin et al. 2000</u> ).		
	Cyclophilin A is a member of the immunophilin class of proteins that all possess peptidyl-prolyl cis/trans isomerase activity and, therefore, are believed to be involved in protein folding and/or intracellular protein transport (Fischer et al. 1989). This protein can interact with several HIV proteins including p55 gag, Vpr, and capsid protein. It has been shown to be necessary for the formation of infectious HIV virions (Franke et al. 1994). Cyclophilin is a specific high-affinity binding protein for the immunosuppressant agent cyclosporin A (Handschumacher et al. 1984). Because of its dramatic effects on decreasing morbidity and increasing survival rates in human transplants, the molecular mechanism of		

immunosuppression by cyclosporin A has been a matter of much interest (Durette et al. 1988). Multiple PPIA pseudogenes that map to different chromosomes have been reported. Multiple alternatively spliced transcript variants encoding distinct isoforms have been observed (Chatellard-Gruaz D et al. 1994).

Human anti cyclophilin antibody, clone AbD00794 has been used successfully for the detection of cyclophilin A in HeLa cell lysates by Western blotting.

## **Activity**

Activity was tested by indirect ELISA: recombinant purified Cyclophilin A (5 µg/ml) plus unrelated control proteins were immobilized on a microtiter plate. Specific binding was monitored by first adding HCA005 (2 µg/ml), then adding a secondary antibody (goat anti-human F(ab')2 fragment specific, AP conjugate. 1:5000 diluted). A fluorescent signal was created by adding the AP substrate Attophos. The signal on the antigen is at least

	5-fold above background, whereas the signal on the control antigens is less than 1.5-fold above background.
Purity	Purity was tested by SDS-PAGE and Coomassie-staining of a 2 μg sample.
Storage	Store at +4°C or at -20°C if preferred.  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.
Guarantee	6 months from date of despatch
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.  His-tag is a registered trademark of EMD Biosciences.
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/HCA005">https://www.bio-rad-antibodies.com/SDS/HCA005</a> 10040
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 <u>HuCAL Antibodies Technical Manual</u>

## **Related Products**

# **Recommended Secondary Antibodies**

Goat Anti Human IgG F(ab')2 (0500-0099...) Alk. Phos., HRP

Mouse Anti Synthetic Peptide HISTIDINE TAG (MCA5995...) HRP

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

America

North & South Tel: +1 800 265 7376

Worldwide

Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Fax: +1 919 878 3751

Email: antibody\_sales\_us@bio-rad.com

Fax: +44 (0)1865 852 739 Email: antibody\_sales\_uk@bio-rad.com

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 'M373171:200827'

## Printed on 22 Apr 2025

© 2025 Bio-Rad Laboratories Inc | Legal | Imprint