

Datasheet: HCA005

Description:	HUMAN ANTI CYCLOPHILIN A
Specificity:	CYCLOPHILIN A
Other names:	CYPA
Format:	Purified
Product Type:	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 www.bio-rad-antibodies.com/protocols.

	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.

Target Species

Human

Species Cross Reactivity

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

Source	E.coli
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN ₃)
Approx. Protein Concentrations	Antibody concentration 0.5 mg/ml
Immunogen	Full length human recombinant cyclophilin A, amino acid residues 1-164, molecular weight 17.9 kDa
External Database Links	<p>UniProt: P62937 Related reagents</p> <p>Entrez Gene: 5478 PPIA Related reagents</p>
Synonyms	CYPA
RRID	AB_609613
Specificity	<p>Human anti cyclophilin A antibody, clone AbD00794 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 (Jin et al. 2000).</p> <p>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).</p> <p>Human anti cyclophilin antibody, clone AbD00794 has been used successfully for the detection of cyclophilin A in HeLa cell lysates by Western blotting.</p>
Activity	Activity was tested by indirect ELISA: recombinant purified Cyclophilin A (5µg/ml) plus unrelated control proteins were immobilized on a microtiter plate. Specific binding was monitored by first adding HCA005 (2µg/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 2µg sample.
Storage	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. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
Guarantee	6 months from date of despatch
Acknowledgements	This product and/or its use is covered by claims of U.S. patents, and/or pending U.S. and non-U.S. patent applications owned by or under license to Bio-Rad Laboratories, Inc. See bio-rad.com/en-us/trademarks for details. His-tag is a registered trademark of EMD Biosciences.
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/HCA00510040
Licensed Use	For <i>in vitro</i> . 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

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](#)

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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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