

Datasheet: HCA292

BATCH NUMBER 159208

Description:	HUMAN ANTI VEDOLIZUMAB
Specificity:	VEDOLIZUMAB
Other names:	Entyvio
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD30136
Isotype:	HuCAL Fab monovalent
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	▪			

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.

Product Form

A monovalent human recombinant Fab (lambda light chain) selected from the HuCAL® phage display library, expressed in *E. coli*. The antibody is tagged with a DYKDDDDK tag and a HIS-tag (HHHHHH) at the C-terminus of the antibody heavy chain. This antibody is supplied as a liquid.

Preparation

Metal chelate affinity chromatography

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.01% Thiomersal

Approx. Protein Concentrations

Antibody concentration 0.5 mg/ml

Immunogen

Vedolizumab

Specificity

Human Anti-Vedolizumab Antibody, clone AbD30136 is a paratope specific, inhibitory anti-idiotypic antibody that specifically recognizes the monoclonal antibody drug vedolizumab. The antibody does not recognize free recombinant human $\alpha 4\beta 7$ integrin or vedolizumab in complex with $\alpha 4\beta 7$ integrin and can be used to measure free vedolizumab levels in serum from patients.

A pair of anti-vedolizumab antibodies can be used to develop a pharmacokinetic (PK) bridging assay to measure free drug. This antibody, in monovalent Fab format, is recommended as the capture antibody, paired with an anti-vedolizumab antibody in full immunoglobulin format, clone AbD30138_hIgG1 ([HCA294](#)) as the detection antibody.

Vedolizumab (Entyvio) is a humanized antibody (IgG1/kappa), derived from a murine antibody. It is used for the treatment of both moderate to severe ulcerative colitis and moderate to severe Crohn's disease, primarily in patients who have lost response to, or are intolerant to inhibitors of tumor necrosis factor alpha (TNF α), such as infliximab, adalimumab. The drug binds specifically to human $\alpha 4\beta 7$ integrin, a key mediator of gastrointestinal inflammation expressed on the surfaces of T and B lymphocytes. By selectively inhibiting the binding of $\alpha 4\beta 7$ integrin to the mucosal addressin cell adhesion molecule-1 (MAdCAM-1), vedolizumab prevents leukocyte binding to the endothelial surface and extravasation into affected tissue. Specifically inhibiting this pathway alleviates gastrointestinal inflammation without impairing systemic immune responses.

[View a summary of all anti-vedolizumab antibodies](#)

Affinity

The monovalent intrinsic affinity of AbD30136 was measured as $K_D=0.1$ nM by real time, label-free molecular interaction analysis on immobilized vedolizumab.

ELISA

Clone AbD30136 can be used in a direct or indirect ELISA or as capture antibody for vedolizumab in a bridging ELISA together with ([HCA293](#), [HCA294](#), [HCA294P](#), [HCA295](#)) as the detection reagent.

Protocol: [PK bridging ELISA to measure free drug](#)

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 $2-8^{\circ}\text{C}$ 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

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. Entyvio is a trademark of Millennium Pharmaceuticals, Inc. His-tag is a trademark of EMD Biosciences.

Health And Safety

Material Safety Datasheet documentation #10094 available at:

Information <https://www.bio-rad-antibodies.com/SDS/HCA292>
10094

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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

Rat Anti Synthetic Peptide DYKDDDDK TAG (MCA4764...) [Purified](#)

Mouse Anti Synthetic Peptide HISTIDINE TAG (MCA5995...) [HRP](#)

Recommended Negative Controls

[HuCAL Fab-FH NEGATIVE CONTROL \(HCA045\)](#)

Recommended Useful Reagents

[HISPEC ASSAY DILUENT \(BUF049A\)](#)

[LYNX RAPID HRP ANTIBODY CONJUGATION KIT \(LNK002P\)](#)

[HUMAN ANTI VEDOLIZUMAB \(HCA293\)](#)

[HUMAN ANTI VEDOLIZUMAB \(HCA294\)](#)

[HUMAN ANTI VEDOLIZUMAB \(HCA295\)](#)

[HUMAN ANTI VEDOLIZUMAB:HRP \(HCA294P\)](#)

North & South Tel: +1 800 265 7376

America 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

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