

## Datasheet: HCA294

**BATCH NUMBER 167941**

<b>Description:</b>	HUMAN ANTI VEDOLIZUMAB
<b>Specificity:</b>	VEDOLIZUMAB
<b>Other names:</b>	Entyvio
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD30138_hIgG1
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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.

<b>Product Form</b>	Human IgG1 antibody (lambda light chain) selected from the HuCAL phage display library and expressed in a human cell line. This antibody is supplied as a liquid.
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
<b>Source</b>	HKB-11
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	Antibody concentration 0.5 mg/ml
<b>Immunogen</b>	Vedolizumab

**Specificity** **Human Anti-Vedolizumab Antibody, clone AbD30138\_hlgG1** 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.

Clone AbD30138\_hlgG1 is a fully human recombinant monoclonal antibody with IgG1 isotype and is suitable as a reference standard in an anti-drug antibody (ADA) assay. A pair of anti-vedolizumab antibodies can be used to develop a pharmacokinetic (PK) bridging assay to measure free drug. This antibody, in full immunoglobulin format, is recommended as the detection antibody paired with clone AbD30136 ([HCA292](#)) in monovalent Fab format as the capture 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 $\alpha$ ), 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 intrinsic affinity of the monovalent form of Human anti Vedolizumab antibody, clone AbD30138\_hlgG1 is  $K_D=1.5$  nM as measured by real time, label-free molecular interaction analysis on immobilized Vedolizumab.

---

**ELISA** Human anti Vedolizumab antibody, clone AbD30138\_hlgG1 can be used in a direct or indirect ELISA or as detection antibody for vedolizumab in a bridging ELISA together with ([HCA292](#)) as the capture reagent. Furthermore, it may be used as a calibrator for the set-up of an anti-drug antibody assay.

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

---

**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** 12 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.  
Entyvio is a trademark of Millennium Pharmaceuticals, Inc.

---

**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at:  
<https://www.bio-rad-antibodies.com/SDS/HCA294>  
10040

---

**Licensed Use**

For *in vitro* research purposes and for commercial applications for the provision of *in vitro* testing services to support preclinical and clinical drug development. Any re-sale in any form or any other commercial application needs a written agreement with 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 Useful Reagents

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

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

[HUMAN ANTI VEDOLIZUMAB \(HCA292\)](#)

[MOUSE ANTI HUMAN IgG \(Fc\) CH2 DOMAIN:HRP \(MCA647P\)](#)

**North & South America**

Tel: +1 800 265 7376

Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto: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](mailto: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](https://bio-rad-antibodies.com/datasheets)

'M421015:230706'

**Printed on 01 Mar 2024**