

# Datasheet: HCA271 BATCH NUMBER 168418

Description:	HUMAN ANTI ADALIMUMAB	
Specificity:	ADALIMUMAB	
Other names:	HUMIRA®	
Format:	Purified	
Product Type:	Monoclonal Antibody	
Clone:	AbD18655_hlgE	
Isotype:	IgE	
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				

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**

Human IgE 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.

Preparation	Purified IgE prepared by affinity chromatography
Source	HKB-11
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	Adalimumab (Humira®)

#### **Specificity**

**Human anti Adalimumab, clone AbD18655\_hlgE**, is an ultra-high affinity, recombinant anti-idiotypic antibody that specifically recognizes adalimumab monoclonal antibody and inhibits the binding of adalimumab to its target, TNFα. This antibody is derived from the same parent clone as <u>HCA204</u> and has been converted to an IgE isotype.

Repeated administration of biotherapeutic drugs can result in the induction of anti-drug antibodies (ADAs), which may affect efficacy of the drug and may cause adverse events including hypersensitivity reactions. Most ADAs have isotype IgG, but ADAs with isotype IgE can potentially elicit anaphylactic reactions. The FDA draft guidance for immunogenicity testing of therapeutic proteins indicates that where the risk of anaphylaxis is a concern, assays should be developed to investigate ADAs with IgE isotype.

Clone AbD18655\_hlgE is a fully human antibody with isotype IgE, ideal for use as a reference standard in an ELISA to measure IgE ADAs in patient serum.

Adalimumab (branded as Humira®) is a fully human monoclonal antibody (IgG1/kappa) approved for the treatment of ankylosing spondylitis, Crohn's disease, psoriasis and several forms of arthritis. The antibody is specific for TNF $\alpha$ , and acts by blocking the activation of TNF receptors by TNF $\alpha$ . This inactivation down-regulates the inflammatory reactions associated with autoimmune diseases.

#### View a summary of all anti-adalimumab antibodies.

#### **Affinity**

The intrinsic affinity of the monovalent form of this antibody is  $K_D$ =0.06 nM as measured by real time, label-free molecular interaction analysis on immobilized adalimumab.

#### **ELISA**

This product may be used in an indirect ELISA.

This antibody is fully human and can be used as a reference standard in an ADA assay.

#### **Further Reading**

1. Wu, Y., *et al.* (2013) An electrochemiluminescence (ECL)-based assay for the specific detection of anti-drug antibodies of the IgE isotype. <u>J Pharm Biomed Anal. 86: 73-81.</u>
2. Puxeddu, I., *et al.* (2016) Hypersensitivity reactions during treatment with biological agents. Clin Exp Rheumatol.34: 129-32.

#### 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.

Humira is a trademark of Abbott Laboratories.

Health And Safety Information	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/HCA271">https://www.bio-rad-antibodies.com/SDS/HCA271</a> 10040
Licensed Use	For <i>in vitro</i> research purposes and for commercial applications for the provision of <i>in vitro</i> 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 <u>HuCAL Antibodies Technical Manual</u> .

# **Related Products**

## **Recommended Secondary Antibodies**

Mouse Anti Human IgE (MCA2116...) HRP

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

## **Recommended Useful Reagents**

HISPEC ASSAY DILUENT (BUF049B)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739

Europe

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

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 'M428434:240301'

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