

## Datasheet: HCA418

<b>Description:</b>	HUMAN ANTI CANAKINUMAB
<b>Specificity:</b>	CANAKINUMAB
<b>Other names:</b>	Ilaris
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD54111ia
<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 (kappa light chain) selected from the HuCAL phage display library and expressed in a human cell line. This product 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>	Canakinumab

**Specificity** **Human Anti-Canakinumab Antibody, clone AbD54111ia** is a paratope specific, inhibitory, anti-idiotypic antibody (Type 1) that specifically recognizes the free human monoclonal antibody drug canakinumab, and its biosimilar products. It does not recognize the drug target, interleukin-1 beta (IL-1 $\beta$ ), nor canakinumab in complex with IL-1 $\beta$ . This antibody can be used to measure free canakinumab levels in serum from patients.

HCA418 is a fully human recombinant monoclonal antibody with IgG1 isotype and is suitable as a surrogate positive control or calibrator in an anti-drug antibody (ADA) assay. This antibody has a monovalent intrinsic affinity of 7.7nM and is one of the three antibodies offered for ADA assays. Antibody [HCA417](#) has an affinity of 1.5nM and [HCA419](#) has an affinity of 9.6nM.

Canakinumab (trade name Ilaris) is a fully humanized monoclonal IgG1/kappa antibody with allotype G1m3. It binds to interleukin-1 beta (IL-1 $\beta$ ) to neutralize up-regulated 1 $\beta$  signaling, resulting in suppression of inflammation in patients with disorders of autoimmune origin. Canakinumab is indicated for treatment of Cryopyrin-Associated Periodic Syndromes (CAPS), three rare and serious auto-inflammatory diseases, Still's disease, and gouty arthritis.

---

**Affinity** The intrinsic affinity of the monovalent form of Human Anti-Canakinumab Antibody, clone AbD54111ia is  $K_D = 7.7$  nM as measured by real time, label free molecular interaction analysis on immobilized canakinumab

---

**ELISA** Clone AbD54111ia can be used in indirect ELISA to detect canakinumab. It can also be used as a surrogate positive control or a calibrator in an anti-drug antibody (ADA) assay, together with [HCA417](#) and [HCA419](#)

Protocol: [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](http://bio-rad.com/en-us/trademarks) for details.  
Ilaris is a trademark of Novartis AG.

---

**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/HCA418>  
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 CANAKINUMAB \(HCA417\)](#)

[HUMAN ANTI CANAKINUMAB \(HCA419\)](#)

[HUMAN ANTI CANAKINUMAB \(TZA063\)](#)

[HUMAN ANTI CANAKINUMAB \(TZA064\)](#)

**North & South** Tel: +1 800 265 7376

**America** 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)  
'M434290:250207'

**Printed on 07 Feb 2025**

---

© 2025 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)