

## Datasheet: HCA417

Description:	HUMAN ANTI CANAKINUMAB	
Specificity:	CANAKINUMAB	
Other names:	llaris	
Format:	Purified	
<b>Product Type:</b>	Monoclonal Antibody	
Clone:	AbD54331ia	
Isotype:	lgG1	
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 IgG1 antibody (lambda light chain) selected from the HuCAL phage display library and expressed in a human cell line. This product is supplied as a liquid.

Preparation	Purified IgG prepared by affinity chromatography on Protein A
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	Canakinumab

#### Specificity

Human Anti-Canakinumab Antibody, clone AbD54331ia 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.

HCA417 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 1.5nM and is one of the three antibodies offered for ADA assays. Antibody <u>HCA418</u> has an affinity of 7.7nM and <u>HCA419</u> has an affinity of 9.6nM.

Canakinumab (trade name llaris) 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 AbD54331ia is  $K_D = 1.5$  nM as measured by real time, label free molecular interaction analysis on immobilized canakinumab

#### **ELISA**

Clone AbD54331ia 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 <u>HCA418</u> and <u>HCA419</u>

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 for details.

Ilaris is a trademark of Novartis AG.

# Health And Safety Information

Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/HCA417">https://www.bio-rad-antibodies.com/SDS/HCA417</a> 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 <u>HuCAL Antibodies Technical Manual</u> .

# Related Products

# **Recommended Useful Reagents**

**HISPEC ASSAY DILUENT (BUF049A)** 

LYNX RAPID HRP ANTIBODY CONJUGATION KIT (LNK002P)

HUMAN ANTI CANAKINUMAB (HCA418)

**HUMAN ANTI CANAKINUMAB (HCA419)** 

**HUMAN ANTI CANAKINUMAB (TZA063)** 

**HUMAN ANTI CANAKINUMAB (TZA064)** 

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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 'M434289:250207'

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