

Datasheet: TZA063

**BATCH NUMBER 169858**

<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>	AbD54116
<b>Isotype:</b>	Fab antibody
<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.

### Product Form

A monovalent human recombinant Fab (lambda light chain) selected from the HuCAL® phage display library, expressed in a proprietary *E. coli* strain. The antibody is tagged with a DYKDDDDK tag, a SpyTag version 2 (VPTIVMVDAYKRYK) and a His6-tag (HHHHHH) at the C-terminus of the antibody heavy chain. This antibody is supplied as a liquid.

### Preparation

Metal chelate affinity chromatography

### Source

*E. coli*

### Buffer Solution

Phosphate buffered saline

### Preservative Stabilisers

0.0095% MIT

### Approx. Protein

Antibody concentration 0.5 mg/ml

## Concentrations

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**Immunogen** Canakinumab

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**Specificity** **Human Anti-Canakinumab Antibody, clone AbD54116ad** 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, the human 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.

A pair of anti-canakinumab antibodies can be used to develop a pharmacokinetic (PK) bridging assay to measure free drug; clone AbD54116ad is recommended as a capture antibody, paired with Human Anti-Canakinumab Antibody, clone AbD54331 ([TZA064](#)) as the detection antibody.

TZA063 is a monovalent Fab antibody incorporating a SpyTag at the C-terminus end of the antibody heavy chain for conversion by the end user into alternative formats using any of the [SpyCatchers](#) available in our catalog.

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.

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**Affinity** The monovalent intrinsic affinity of AbD54116ad was measured as  $K_D = 9.6$  nM by real time, label free molecular interaction analysis on immobilized canakinumab.

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**ELISA** Clone AbD54116ad can be used in indirect ELISA to detect canakinumab. It can also be used as a capture antibody to develop a pharmacokinetic (PK) bridging ELISA for canakinumab, together with [TZA064](#) or [TZA064P](#) as the detection reagent.

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**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.

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**Guarantee** 12 months from date of despatch

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**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.  
His-tag is a registered trademark of EMD Biosciences.  
Ilaris is a trademark of Novartis AG.

<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20479 available at: <a href="https://www.bio-rad-antibodies.com/SDS/TZA063">https://www.bio-rad-antibodies.com/SDS/TZA063</a> 20479
<b>Licensed Use</b>	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.
<b>Regulatory</b>	For research purposes only
<b>Technical Advice</b>	Recommended protocols for coupling a Fab antibody with a SpyTag to a SpyCatcher can be found at <a href="#">SpyTag and SpyCatcher Products</a> , and further information about HuCAL recombinant antibody technology can be found in the <a href="#">HuCAL Antibodies Technical Manual</a>

## Related Products

### Recommended Useful Reagents

- [HUMAN ANTI CANAKINUMAB \(TZA064\)](#)
- [HUMAN ANTI CANAKINUMAB \(HCA417\)](#)
- [HUMAN ANTI CANAKINUMAB \(HCA418\)](#)
- [HUMAN ANTI CANAKINUMAB \(HCA419\)](#)
- [HISPEC ASSAY DILUENT \(BUF049A\)](#)

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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](https://www.bio-rad-antibodies.com/datasheets)  
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