

Datasheet: TZA0112P

**BATCH NUMBER 171093**

<b>Description:</b>	HUMAN ANTI CANAKINUMAB (DRUG/TARGET COMPLEX):HRP
<b>Specificity:</b>	CANAKINUMAB DRUG/TARGET COMPLEX
<b>Other names:</b>	ILARIS
<b>Format:</b>	HRP
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD54142
<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 bivalent human recombinant Fab (lambda light chain) generated by coupling of the monovalent SpyTagged Fab [TZA0112](#) with a HRP conjugated BiSpyCatcher version 2 ([TZC002P](#)). The coupled antibody has two DYKDDDDK tags and three His6-tags. It contains SpyTag3 peptide ([BLP086](#)) in 5-fold molar excess to block any unreacted Catcher sites. 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/IL-1 beta complex

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**Specificity** **Human Anti-Canakinumab (Drug/Target Complex) Antibody, clone AbD54142** specifically recognizes the antibody drug canakinumab when in complex with its target, the human interleukin-1 beta (IL-1 $\beta$ ). It does not recognize free canakinumab nor unbound IL-1 $\beta$ .

The monovalent Fab format of this antibody, clone AbD54142ad (**TZA0112**) is tagged with a SpyTag2 at the C-terminus of the Fab heavy chain, enabling the user to couple it to a [SpyCatcher reagent](#) for conversion to alternative formats in less than one hour.

This antibody is also available as a bivalent Fab antibody pre-coupled to the HRP-conjugated BiSpyCatcher2 ([TZC002P](#)) under product code **TZA0112P** for direct detection of the Canakinumab/ IL-1 $\beta$  complex in bioanalysis assays.

Clone AbD54142 can be used in pharmacokinetic (PK) antigen capture format assays to measure canakinumab that has been captured via immobilized IL-1 $\beta$ . It is ideal for bioanalytical assays to measure the level of drug or biosimilar in complex with the IL-1 $\beta$  target.

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 AbD54142pap was measured as  $K_D = 3.3$  nM by real time, label free molecular interaction analysis on immobilized human IL-1 beta/canakinumab complex.

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**ELISA** Clone AbD54142pap may be used in a direct ELISA to detect the human IL-1 beta/canakinumab complex or as a detection reagent for canakinumab captured via immobilised IL-1 beta.

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**Storage** This product is shipped frozen.  
When ready to use, thaw and aliquot the sample as needed. Store aliquots at -70°C, if available, otherwise store at -20°C. It is not recommended to keep aliquots at 4°C for more than one week.

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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.

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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20479 available at: <a href="https://www.bio-rad-antibodies.com/SDS/TZA0112P">https://www.bio-rad-antibodies.com/SDS/TZA0112P</a>
<b>Licensed Use</b>	For <i>in vitro</i> research purposes only, unless otherwise specified in writing by 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>

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## Related Products

### Recommended Useful Reagents

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

[HUMAN ANTI CANAKINUMAB \(HCA417\)](#)

[HUMAN ANTI CANAKINUMAB \(HCA418\)](#)

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

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

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

[HUMAN ANTI CANAKINUMAB:HRP \(TZA064P\)](#)

[HUMAN ANTI CANAKINUMAB \(DRUG/TARGET COMPLEX\) \(TZA0112\)](#)

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)  
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