

## Datasheet: HCA252G

<b>Description:</b>	HUMAN ANTI TOCILIZUMAB
<b>Specificity:</b>	TOCILIZUMAB
<b>Other names:</b>	ACTEMRA®, ROACTEMRA®
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD21362
<b>Isotype:</b>	HuCAL Fab monovalent
<b>Quantity:</b>	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 (1)	▪			

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.

**(1) NB. The Rat anti DYKDDDDK-tag antibody, clone 6F7 is not suitable for use with this antibody as clone 6F7 exhibits cross reactivity with the human IL-6R**

#### Product Form

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

#### Buffer Solution

Phosphate buffered saline

#### Preservative Stabilisers

0.01% Thiomersal

#### Approx. Protein Concentrations

Antibody concentration 1.0 mg/ml

#### Immunogen

Tocilizumab

**Specificity**

**Human Anti-Tocilizumab Antibody, clone AbD21362** is a paratope specific, anti-idiotypic antibody that binds to free tocilizumab but not to human Interleukin-6 Receptor (IL-6R) or the drug/IL-6R complex. The antibody can be used to measure the levels of tocilizumab and biosimilar products in bioanalytical and patient monitoring assays.

A pair of anti-tocilizumab antibodies can be used to develop a pharmacokinetic (PK) bridging assay to measure free drug. This antibody, in monovalent Fab format, is recommended as a capture antibody, paired with an HRP conjugated Anti-Tocilizumab Antibody in full immunoglobulin format, clone AbD21338\_hIgG1 ([HCA253](#)) as the detection antibody.

Tocilizumab (RoActemra/Actemra) is a humanized IgG1/kappa monoclonal antibody approved for the treatment of moderate to severe rheumatoid arthritis and for the treatment of systemic juvenile idiopathic arthritis. The therapeutic antibody is directed against IL-6R and acts by blocking the binding of IL-6 (both the soluble form, sIL-6R, and the membrane bound form, mIL-6R) to IL-6, thus impeding the pro-inflammatory properties of this cytokine.

[View a summary of all anti-tocilizumab antibodies](#)

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**Affinity**

The monovalent intrinsic affinity of this antibody was measured as  $K_D=0.9$  nM by real time, label-free molecular interaction analysis on immobilized tocilizumab.

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**ELISA**

This product may be used in a direct or indirect ELISA or as a capture reagent in a PK bridging ELISA together with HCA253 as the detection reagent.

Protocol: [PK bridging ELISA to measure free drug](#)

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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**

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His-tag is a registered trademark of EMD Biosciences.

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**Health And Safety Information**

Material Safety Datasheet documentation #10094 available at:  
10094: <https://www.bio-rad-antibodies.com/uploads/MSDS/10094.pdf>

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**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.

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**Regulatory** For research purposes only

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**Technical Advice** Recommended protocols and further information about HuCAL recombinant antibody technology can be found in the [HuCAL Antibodies Technical Manual](#)

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## Related Products

### Recommended Secondary Antibodies

Mouse Anti Synthetic Peptide HISTIDINE TAG (MCA5995...) [HRP](#)

### Recommended Useful Reagents

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

[LYNX RAPID HRP ANTIBODY CONJUGATION KIT \(LNK002P\)](#)

[HUMAN ANTI TOCILIZUMAB \(HCA253\)](#)

[HUMAN ANTI TOCILIZUMAB \(HCA254\)](#)

[HUMAN ANTI TOCILIZUMAB \(HCA255\)](#)

[HUMAN ANTI TOCILIZUMAB \(HCA256\)](#)

[HUMAN ANTI TOCILIZUMAB \(HCA257\)](#)

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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://bio-rad-antibodies.com/datasheets)

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