

Datasheet: HCA252

**BATCH NUMBER 157486**

|                      |                        |
|----------------------|------------------------|
| <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>     | 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 (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 0.5 mg/ml

### Immunogen

Tocilizumab

|                                      |  |
|--------------------------------------|--|
| <b>Specificity</b>                   | <p><b>Human Anti-Tocilizumab Antibody, clone AbD21362</b> 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.</p> <p>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 (<a href="#">HCA253</a>) as the detection antibody.</p> <p>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-6R (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.</p> <p><a href="#">View a summary of all anti-tocilizumab antibodies</a></p> |
| <b>Affinity</b>                      | <p>The monovalent intrinsic affinity of this antibody was measured as <math>K_D=0.9</math> nM by real time, label-free molecular interaction analysis on immobilized tocilizumab.</p>  |
| <b>ELISA</b>                         | <p>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.</p> <p>Protocol: <a href="#">PK bridging ELISA to measure free drug</a></p>  |
| <b>Storage</b>                       | <p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use</p>  |
| <b>Guarantee</b>                     | <p>12 months from date of despatch</p>   |
| <b>Acknowledgements</b>              | <p>Sold under license of U.S. Patents 6753136, 7785859 and 8273688 and corresponding patents. This antibody was developed by Bio-Rad, Zeppelinstr. 4, 82178 Puchheim, Germany.</p> <p>Actemra® and RoActemra® are registered trademarks of Hoffman-La Roche and Chugai Pharmaceuticals co., Ltd.</p> <p>His-tag is a registered trademark of EMD Biosciences.</p>  |
| <b>Health And Safety Information</b> | <p>Material Safety Datasheet documentation #10094 available at: <a href="https://www.bio-rad-antibodies.com/SDS/HCA252">https://www.bio-rad-antibodies.com/SDS/HCA252</a></p> <p>10094</p>   |
| <b>Licensed Use</b>                  | <p>For in vitro research purposes and for commercial applications for the provision of in vitro</p>  |

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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