

Datasheet: HCA257P

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| Description: | HUMAN ANTI TOCILIZUMAB:HRP |
| Specificity: | TOCILIZUMAB |
| Other names: | ACTEMRA®, ROACTEMRA® |
| Format: | HRP |
| Product Type: | Monoclonal Antibody |
| Clone: | AbD22155_hlgG1 |
| Isotype: | IgG1 |
| 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 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.

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| Product Form | Human IgG1 antibody (lambda light chain) selected from the HuCAL® phage display library and expressed in a human cell line. Conjugated to horseradish peroxidase (HRP) - liquid. |
| Preparation | Purified IgG prepared by affinity chromatography on Protein A |
| Buffer Solution | Phosphate buffered saline |
| Preservative Stabilisers | 0.01% Thiomersal |
| Approx. Protein Concentrations | IgG concentration 1.0 mg/ml |
| Immunogen | Tocilizumab and tocilizumab-sIL-6R complex |
| Specificity | Human Anti-Tocilizumab Antibody, clone AbD22155_hlgG1 is a non-paratope specific, |

anti-idiotypic antibody that binds to free tocilizumab and also to tocilizumab bound to its target, human interleukin-6 receptor (IL-6R). The non-inhibitory antibody can be used to measure total levels of tocilizumab and biosimilar products in bioanalytical assays.

Clone AbD22155_hlgG1 can be used to develop a pharmacokinetic (PK) bridging assay to measure total drug levels (free drug, partially bound and fully bound). This non-inhibitory antibody is recommended as the detection antibody, paired with the inhibitory capture antibody clone AbD21362 ([HCA252](#)). This combination enables measurement of free and partially bound tocilizumab, which is equivalent to total drug when trough serum levels are above 10 µg/ml.

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.

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

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| Affinity | The monovalent intrinsic affinity of this antibody was measured as $K_D = 31$ nM by real time, label free molecular interaction analysis on immobilized tocilizumab. |
| ELISA | This product may be used in a direct ELISA or as a detection reagent in a bridging ELISA together with HCA252 as the capture reagent. Protocol: PK bridging ELISA to measure total drug |
| References | 1. Kashiwagi, N. <i>et al.</i> (2017) Method for measuring anti-drug antibody US Patent Application US20170315118A1 |
| 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. |
| 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. Actemra® and RoActemra® are registered trademarks of Hoffman-La Roche and Chugai Pharmaceuticals co., Ltd. |
| 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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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 [HuCAL Antibodies Technical Manual](#)

Related Products

Recommended Useful Reagents

[HUMAN ANTI TOCILIZUMAB \(HCA252\)](#)

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

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

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

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

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

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

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

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