

Datasheet: HCA253

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| Description: | HUMAN ANTI TOCILIZUMAB |
| Specificity: | TOCILIZUMAB |
| Other names: | ACTEMRA®, ROACTEMRA® |
| Format: | Purified |
| Product Type: | Monoclonal Antibody |
| Clone: | AbD21338_hIgG1 |
| 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.

Product Form

Human IgG1 antibody (kappa light chain) selected from the HuCAL® phage display library and expressed in a human cell line. This antibody is supplied as a liquid.

Preparation

Purified IgG prepared by affinity chromatography on Protein A

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.01% Thiomersal

Approx. Protein Concentrations

Antibody concentration 0.5 mg/ml

Immunogen

Tocilizumab

Specificity

Human Anti-Tocilizumab Antibody, clone AbD21338 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.

Clone AbD21338_hIgG1 is a fully human recombinant monoclonal antibody with IgG1 isotype and is suitable as a surrogate positive control or calibrator (high affinity) in an anti-drug antibody (ADA) assay. Additionally it can be used to develop a pharmacokinetic (PK) bridging assay to measure

free drug. This antibody is recommended as the detection antibody, paired with Anti-Tocilizumab Antibody clone AbD21362 ([HCA252](#)) in monovalent Fab format as the capture 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 $K_D=0.1$ 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 free drug This antibody is fully human and can be used as a reference standard in an ADA assay. Protocol: ADA bridging ELISA |
| Storage | Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. 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 |
| Guarantee | 12 months from date of despatch |
| Acknowledgements | 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. 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 |
| 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. |
| 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

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

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

[MOUSE ANTI HUMAN IgG \(Fc\) CH2 DOMAIN:HRP \(MCA647P\)](#)

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

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

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

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

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

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