

## Datasheet: HCA253

**BATCH NUMBER 164968**

<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>	AbD21338_hIgG1
<b>Isotype:</b>	IgG1
<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.

<b>Product Form</b>	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.
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.01% Thiomersal
<b>Approx. Protein Concentrations</b>	Antibody concentration 0.5 mg/ml
<b>Immunogen</b>	Tocilizumab
<b>Specificity</b>	<b>Human Anti-Tocilizumab Antibody, clone AbD21338</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.

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](#)

<b>Affinity</b>	The intrinsic affinity of the monovalent form of this antibody is $K_D=0.1$ nM as measured by real time, label-free molecular interaction analysis on immobilized Tocilizumab.
<b>ELISA</b>	<p>This product may be used in a direct ELISA or as a detection reagent in a bridging ELISA together with <a href="#">HCA252</a> as the capture reagent.</p> <p>Protocol: <a href="#">PK bridging ELISA to measure free drug</a></p> <p>This antibody is fully human and can be used as a reference standard in an ADA assay.</p> <p>Protocol: <a href="#">ADA bridging ELISA</a>.</p>
<b>Storage</b>	<p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	<p>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 <a href="http://bio-rad.com/en-us/trademarks">bio-rad.com/en-us/trademarks</a> for details.</p> <p>Actemra® and RoActemra® are registered trademarks of Hoffman-La Roche and Chugai Pharmaceuticals co., Ltd.</p>
<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation #10094 available at: <a href="https://www.bio-rad-antibodies.com/SDS/HCA253">https://www.bio-rad-antibodies.com/SDS/HCA253</a></p> <p>10094</p>

<b>Licensed Use</b>	For <i>in vitro</i> research purposes and for commercial applications for the provision of <i>in vitro</i> 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.
<b>Regulatory</b>	For research purposes only
<b>Technical Advice</b>	Recommended protocols and further information about HuCAL recombinant antibody technology can be found in the <a href="#">HuCAL Antibodies Technical Manual</a> .

## 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 \(HCA257\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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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