

## Datasheet: HCA257

**BATCH NUMBER 160029**

<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>	AbD22155_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.

### Product Form

Human IgG1 antibody (lambda 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

IgG concentration 0.5 mg/ml

### Immunogen

Tocilizumab and tocilizumab-sIL-6R complex

### Specificity

**Human Anti-Tocilizumab Antibody, clone AbD22155\_hIgG1** 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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<b>Affinity</b>	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.
<b>ELISA</b>	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. Protocol: <a href="#">PK bridging ELISA to measure total drug</a>
<b>References</b>	1. Kashiwagi, N. <i>et al.</i> (2017) Method for measuring anti-drug antibody <a href="#">US Patent Application US20170315118A1</a>
<b>Storage</b>	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.
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	Sold under license of U.S. Patents 7785859 and 8273688 and corresponding patents. This antibody was developed by Bio-Rad. Actemra® and RoActemra® are registered trademarks of Hoffman-La Roche and Chugai Pharmaceuticals co., Ltd.
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10094 available at: <a href="https://www.bio-rad-antibodies.com/SDS/HCA257">https://www.bio-rad-antibodies.com/SDS/HCA257</a> 10094

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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 Useful Reagents

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

[LYNX RAPID HRP ANTIBODY CONJUGATION KIT \(LNK001P\)](#)

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

[LYNX RAPID HRP ANTIBODY CONJUGATION KIT \(LNK003P\)](#)

[LYNX RAPID HRP ANTIBODY CONJUGATION KIT \(LNK004P\)](#)

[LYNX RAPID HRP ANTIBODY CONJUGATION KIT \(LNK005P\)](#)

[LYNX RAPID HRP ANTIBODY CONJUGATION KIT \(LNK006P\)](#)

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

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

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

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

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

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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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