

Datasheet: HCA257

Description:	HUMAN ANTI TOCILIZUMAB
Specificity:	TOCILIZUMAB
Other names:	ACTEMRA®, ROACTEMRA®
Format:	Purified
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.

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_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_hIgG1 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](#)

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	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

[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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