

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
Source	HKB-11
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
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_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](#)

Affinity The intrinsic affinity of the monovalent form of this antibody is $K_D = 31$ nM as measured 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. *et al.* (2017) Method for measuring anti-drug antibody [US Patent Application US20170315118A1](#)

Storage 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.

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.
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Health And Safety Information Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/HCA257>

Licensed Use	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.
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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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M430211:240503'

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