

Datasheet: HCA257P

Description:	HUMAN ANTI TOCILIZUMAB:HRP
Specificity:	TOCILIZUMAB
Other names:	ACTEMRA®, ROACTEMRA®
Format:	HRP
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. Conjugated to horseradish peroxidase (HRP) - liquid.
Preparation	Purified IgG prepared by affinity chromatography on Protein A
Source	HKB-11
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.01% Thiomersal
Approx. Protein Concentrations	IgG concentration 1.0 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 frozen.
When ready to use, thaw and aliquot the sample as needed. Store aliquots at -70°C, if available, otherwise store at -20°C. It is not recommended to keep aliquots at 4°C for more than one week.

Guarantee 12 months from date of despatch

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Health And Safety Information Material Safety Datasheet documentation #10094 available at: <https://www.bio-rad-antibodies.com/SDS/HCA257P>
10094

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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 \(HCA252\)](#)

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

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

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

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

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

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