

## Datasheet: HCA253P

**BATCH NUMBER 166270**

<b>Description:</b>	HUMAN ANTI TOCILIZUMAB:HRP
<b>Specificity:</b>	TOCILIZUMAB
<b>Other names:</b>	ACTEMRA®, ROACTEMRA®
<b>Format:</b>	HRP
<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. Conjugated to horseradish peroxidase (HRP) - liquid.
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
<b>Source</b>	HKB-11
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.01% Thiomersal
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Tocilizumab

**Specificity**

**Human Anti-Tocilizumab Antibody, clone AbD21338** 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\_hlgG1 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-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  $K_D=0.1$  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 free drug](#).

**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

**Acknowledgements**

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**Health And Safety Information**

Material Safety Datasheet documentation #10094 available at:  
<https://www.bio-rad-antibodies.com/SDS/HCA253P>  
10094

**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.

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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

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

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

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

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

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

[HUMAN ANTI TOCILIZUMAB \(HCA257\)](#)

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