

Datasheet: HCA253P

Description:	HUMAN ANTI TOCILIZUMAB:HRP
Specificity:	TOCILIZUMAB
Other names:	ACTEMRA®, ROACTEMRA®
Format:	HRP
Product Type:	Monoclonal Antibody
Clone:	AbD21338_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 (kappa 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

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 lgG1 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 tocilizuimab.

ELISA

This product may be used in a direct ELISA or as a detection reagent in a bridging ELISA together with <u>HCA252</u> as the capture reagent.

Protocol: PK bridging ELISA to measure free drug.

References

1. Arceo, T. *et al.* (2025) Impact of positive control binding properties on anti-drug antibody assay performance. <u>Bioanalysis</u>. <u>June 12: 1-6 [Epub ahead of print]</u>.

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

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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 <u>HuCAL Antibodies Technical Manual</u> .	

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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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M430231:240503'

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