

Datasheet: HCA252G

BATCH NUMBER 164879

Description:	HUMAN ANTI TOCILIZUMAB
Specificity:	TOCILIZUMAB
Other names:	ACTEMRA®, ROACTEMRA®
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD21362
Isotype:	HuCAL Fab monovalent
Quantity:	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 (1)	▪			

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.

(1) NB. The Rat anti DYKDDDDK-tag antibody, clone 6F7 is not suitable for use with this antibody as clone 6F7 exhibits cross reactivity with the human IL-6R

Product Form

A monovalent human recombinant Fab (kappa light chain) selected from the HuCAL phage display library, expressed in *E. coli*. The antibody is tagged with a DYKDDDDK tag and a HIS-tag (HHHHHH) at the C-terminus of the antibody heavy chain. This antibody is supplied as a liquid.

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.01% Thiomersal

Approx. Protein Concentrations

Antibody concentration 1.0 mg/ml

Immunogen

Tocilizumab

Specificity

Human Anti-Tocilizumab Antibody, clone AbD21362 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.

A pair of anti-tocilizumab antibodies can be used to develop a pharmacokinetic (PK) bridging assay to measure free drug. This antibody, in monovalent Fab format, is recommended as a capture antibody, paired with an HRP conjugated Anti-Tocilizumab Antibody in full immunoglobulin format, clone AbD21338_hIgG1 ([HCA253](#)) as the detection 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-6 (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 $K_D=0.9$ nM as measured by real time, label-free molecular interaction analysis on immobilized tocilizumab.

ELISA

This product may be used in a direct or indirect ELISA or as a capture reagent in a PK bridging ELISA together with [HCA253](#) as the detection reagent.
Protocol: [PK bridging ELISA to measure free drug](#).

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

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His-tag is a trademark of EMD Biosciences.

Health And Safety Information

Material Safety Datasheet documentation #10094 available at: <https://www.bio-rad-antibodies.com/SDS/HCA252G>
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 Secondary Antibodies

Mouse Anti Synthetic Peptide HISTIDINE TAG (MCA5995...) [HRP](#)

Recommended Useful Reagents

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

[LYNX RAPID HRP ANTIBODY CONJUGATION KIT \(LNK002P\)](#)

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

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

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

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

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

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