

# Datasheet: HCA252G BATCH NUMBER 164879

Description:	scription: 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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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 DYKDDDK-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 DYKDDDK 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\_hlgG1 (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-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  $K_D$ =0.9 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 <u>HCA253</u> 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

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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His-tag is a trademark of EMD Biosciences.

# Health And Safety Information

Material Safety Datasheet documentation #10094 available at: <a href="https://www.bio-rad-antibodies.com/SDS/HCA252G">https://www.bio-rad-antibodies.com/SDS/HCA252G</a> 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 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)** 

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Email: antibody\_sales\_us@bio-rad.com

Email: antibody\_sales\_uk@bio-rad.com

Email: antibody\_sales\_de@bio-rad.com

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