

## Datasheet: TZA0109

<b>Description:</b>	HUMAN ANTI BUROSUMAB
<b>Specificity:</b>	BUROSUMAB
<b>Other names:</b>	Crysvita
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD63869ad
<b>Isotype:</b>	Fab antibody
<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.

### Product Form

A monovalent human recombinant Fab (lambda light chain) selected from the HuCAL® phage display library, expressed in a proprietary *E. coli* strain. The antibody is tagged with a DYKDDDDK tag, a SpyTag version 2 (VPTIVMVDAYKRYK) and a His6-tag (HHHHHH) at the C-terminus of the antibody heavy chain. This antibody is supplied as a liquid.

### Preparation

Metal chelate affinity chromatography

### Source

*E. coli*

### Buffer Solution

Phosphate buffered saline

### Preservative Stabilisers

0.0095% MIT

### Approx. Protein Concentrations

Antibody concentration 0.5 mg/ml

**Specificity**

**Human Anti-Burosumab Antibody, clone AbD63869ad** is a paratope specific, inhibitory anti-idiotypic antibody (Type 1) that specifically recognizes the humanized monoclonal antibody drug burosumab. It does not recognize the drug target hFGF-23-His, nor burosumab in complex with hFGF-23-His. This antibody can be used to measure free burosumab levels in serum from patients.

A pair of anti-burosumab antibodies can be used to develop a pharmacokinetic (PK) bridging assay to measure free drug; clone AbD63869ad is recommended as a capture antibody, paired with Human Anti-Burosumab Antibody, clone AbD63865pap ([TZA0110P](#)) as the detection antibody.

TZA0109 is a monovalent Fab antibody incorporating a SpyTag at the C-terminus end of the antibody heavy chain for conversion by the end user into alternative formats using any of the [SpyCatchers](#) available in our catalog.

Burosumab (trade name Crysvida) is a humanized monoclonal antibody of the IgG1/kappa isotype that binds to fibroblast growth factor-23 (FGF23), blocking the interaction with the FGFR1. Burosumab therefore inhibits FGF23 signaling, thereby increasing tubular phosphate reabsorption and decreasing renal phosphate excretion, as well as increasing serum levels of 1,25(OH)2D and increasing GI absorption of phosphate. As a result, bone mineralization is improved and the risk of bone disease is decreased. Burosumab is indicated for the treatment of X-linked hypophosphatemia and tumor-induced osteomalacia.

[View a summary of all anti-burosumab antibodies](#)

**Affinity**

The monovalent intrinsic affinity of AbD63869ad was measured as  $K_D = 0.4$  nM by real time, label free molecular interaction analysis on immobilized burosumab.

**ELISA**

Clone AbD63869ad can be used in indirect ELISA to detect burosumab. It can also be used as a capture antibody to develop a pharmacokinetic (PK) bridging ELISA for burosumab together with [TZA0110](#) or [TZA0110P](#) as the detection reagent.

Protocol: [PK bridging ELISA](#)

**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.  
His-tag is a registered trademark of EMD Biosciences.  
Crysvita is a trademark of Kyowa Hakko Kirin and Ultragenyx Pharmaceutical.

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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20479 available at: <a href="https://www.bio-rad-antibodies.com/SDS/TZA0109">https://www.bio-rad-antibodies.com/SDS/TZA0109</a>
<b>Licensed Use</b>	For <i>in vitro</i> research purposes and for commercial applications for the provision of <i>in vitro</i> 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.
<b>Regulatory</b>	For research purposes only
<b>Technical Advice</b>	Recommended protocols for coupling a Fab antibody with a SpyTag to a SpyCatcher can be found at <a href="#">SpyTag and SpyCatcher Products</a> , and further information about HuCAL recombinant antibody technology can be found in the <a href="#">HuCAL Antibodies Technical Manual</a>

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## Related Products

### Recommended Useful Reagents

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

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

[SpyTag3 PEPTIDE \(BLP086\)](#)

[HUMAN ANTI BUROSUMAB \(TZA0110\)](#)

[HUMAN ANTI BUROSUMAB:HRP \(TZA0110P\)](#)

[HUMAN ANTI BUROSUMAB \(DRUG/TARGET COMPLEX\) \(TZA0111\)](#)

[HUMAN ANTI BUROSUMAB \(DRUG/TARGET COMPLEX\):HRP \(TZA0111P\)](#)

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)

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