Datasheet: TZA0109

BATCH NUMBER 171449

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

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

Antibody concentration 0.5 mg/ml

Concentrations

Immunogen	Burosumab
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 Crysvita) 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.
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.
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	

	Crysvita is a trademark of Kyowa Hakko Kirin and Ultragenyx Pharmaceutical.
Health And Safety Information	Material Safety Datasheet documentation #20479 available at: https://www.bio-rad-antibodies.com/SDS/TZA0109
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.
Regulatory	For research purposes only
Technical Advice	Recommended protocols for coupling a Fab antibody with a SpyTag to a SpyCatcher can be found at SpyTag and SpyCatcher Products, and further information about HuCAL recombinant antibody technology can be found in the HuCAL Antibodies Technical Manual

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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M444952:250814'

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