

## Datasheet: HCA231

**BATCH NUMBER 153289**

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|----------------------|---|
| <b>Description:</b>  | HUMAN ANTI ADALIMUMAB (DRUG/TARGET COMPLEX) |
| <b>Specificity:</b>  | ADALIMUMAB (DRUG/TARGET COMPLEX)            |
| <b>Other names:</b>  | HUMIRA®                                     |
| <b>Format:</b>       | Purified                                    |
| <b>Product Type:</b> | Monoclonal Antibody                         |
| <b>Clone:</b>        | AbD20350                                    |
| <b>Isotype:</b>      | HuCAL Fab monovalent                        |
| <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 (kappa light chain) selected from the HuCAL® phage display library, expressed in *E. coli*. This antibody is tagged with a DYKDDDDK tag and a HIS-tag (HHHHHH) at the C-terminus of the antibody heavy chain. This product is supplied as a liquid.

### Preparation

Metal chelate affinity chromatography

### Buffer Solution

Phosphate buffered saline

### Preservative Stabilisers

0.01% Thiomersal

### Approx. Protein Concentrations

Antibody concentration 0.5 mg/ml

### Immunogen

Adalimumab.

|                                      |  |
|--------------------------------------|--|
| <b>Specificity</b>                   | <p><b>Human anti Adalimumab (drug/target complex), clone AbD20350</b>, is an affinity matured, Type 3 anti-idiotypic antibody that specifically recognizes adalimumab complexed with TNF<math>\alpha</math>. It does not recognize the free drug or unbound TNF<math>\alpha</math>. Clone AbD20350 can be used in assays to measure adalimumab that has been captured via immobilized TNF<math>\alpha</math>, thereby avoiding the bridging assay format. It can also be used to measure the level of the drug/target complex and biosimilar products using bioanalytical assays.</p> <p>Adalimumab (brand name Humira<sup>®</sup>) is a human monoclonal antibody (IgG1/kappa) approved for the treatment of rheumatoid, psoriatic and juvenile idiopathic arthritis, ankylosing spondylitis, Crohn's disease and ulcerative colitis. This therapeutic antibody is directed against the pro-inflammatory cytokine tumor necrosis factor alpha (TNF<math>\alpha</math>), blocking its interaction with the p55 (TNFR1, CD120a) and p75 (TNFR2, CD120b) cell surface TNF receptors, resulting in a down-regulation of the abnormal inflammatory response that is characteristic of autoimmune disease.</p> <p><a href="#">View a summary of all anti-adalimumab antibodies.</a></p> |
| <b>Affinity</b>                      | <p>The monovalent intrinsic affinity of this antibody was measured as <math>K_D=3.2</math> nM by real time, label-free molecular interaction analysis on immobilized adalimumab/TNF<math>\alpha</math> complex.</p>  |
| <b>ELISA</b>                         | <p>This product may be used in an indirect ELISA to detect the adalimumab/TNF<math>\alpha</math> complex or to detect adalimumab bound to immobilized TNF<math>\alpha</math>.</p> <p>Protocol: <a href="#">PK antigen capture ELISA to measure bound drug exclusively</a></p>  |
| <b>References</b>                    | <p>1. Harth, S. <i>et al.</i> (2019) Generation by phage display and characterization of drug-target complex-specific antibodies for pharmacokinetic analysis of biotherapeutics. <a href="#">MAbs. 11 (1): 178-190.</a></p>   |
| <b>Storage</b>                       | <p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>   |
| <b>Guarantee</b>                     | <p>12 months from date of despatch</p>   |
| <b>Acknowledgements</b>              | <p>Sold under license of U.S. Patents 6753136, 7785859 and 8273688 and corresponding patents. This antibody was developed by Bio-Rad, Zeppelinstr. 4, 82178 Puchheim, Germany.</p> <p>Humira<sup>®</sup> is a registered trademark of Abbott Laboratories.</p> <p>His-tag is a registered trademark of EMD Biosciences.</p>  |
| <b>Health And Safety Information</b> | <p>Material Safety Datasheet documentation #10094 available at: 10094: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10094.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10094.pdf</a></p>   |
| <b>Licensed Use</b>                  | <p>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</p>  |

form or any other commercial application needs a written agreement with Bio-Rad.

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**Regulatory** For research purposes only

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**Technical Advice** Recommended protocols and further information about HuCAL recombinant antibody technology can be found in the [HuCAL Antibodies Technical Manual](#)

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Synthetic Peptide HISTIDINE TAG (AHP1656...) [Biotin](#)  
Rat Anti Synthetic Peptide DYKDDDDK TAG (MCA4764...) [HRP](#)  
Mouse Anti Synthetic Peptide HISTIDINE TAG (MCA5995...) [HRP](#)  
Rabbit Anti Synthetic Peptide DYKDDDDK TAG (AHP1074...) [HRP](#)  
Mouse Anti Synthetic Peptide HISTIDINE TAG (MCA1396...) [Alk. Phos.](#), [Biotin](#)

### Recommended Useful Reagents

[LYNX RAPID HRP ANTIBODY CONJUGATION KIT \(LNK002P\)](#)  
[HISPEC ASSAY DILUENT \(BUF049A\)](#)  
[RECOMBINANT HUMAN TNF ALPHA \(PHP051\)](#)  
[HUMAN ANTI ADALIMUMAB \(DRUG/TARGET COMPLEX\) \(HCA232\)](#)

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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](https://bio-rad-antibodies.com/datasheets)  
'M371653:200612'

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