

## Datasheet: HCA221

<b>Description:</b>	HUMAN ANTI CETUXIMAB
<b>Specificity:</b>	CETUXIMAB
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AbD19830_hIgG1
<b>Isotype:</b>	IgG1
<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

Human IgG1 antibody (lambda light chain) selected from the HuCAL® phage display library and expressed in a human cell line. This antibody is supplied as a liquid.

### Preparation

Purified IgG prepared by affinity chromatography on Protein A

### Buffer Solution

Phosphate buffered saline

### Preservative Stabilisers

0.01% Thiomersal

### Approx. Protein Concentrations

IgG concentration 0.5 mg/ml

### Immunogen

Cetuximab.

### Specificity

**Human anti Cetuximab, clone AbD19830\_hIgG1**, is an anti-idiotypic antibody that binds specifically to cetuximab and inhibits the binding of the drug to its target. Human anti Cetuximab, clone AbD19830\_hIgG1 can be used to measure the levels of cetuximab and biosimilar products using bioanalytical assays.

In the HRP-conjugated format clone AbD19830\_hIgG1 is ideal for use as detection antibody in pharmacokinetic (PK) assays. It is a fully human antibody and therefore may also be used as a calibrator in immune response assays to measure the anti-drug-antibody (ADA) response in patient sera.

Cetuximab (brand name Erbitux®) is a chimeric monoclonal antibody drug (IgG1/kappa) approved for treatment of KRAS wild-type metastatic colorectal cancers and squamous cell carcinoma of the head and neck. This therapeutic antibody, directed against the Epidermal Growth Factor Receptor (EGFR), inhibits tumor cell proliferation by blocking the interaction of Epidermal Growth Factor (EGF) with its receptor.

[View a summary of all anti cetuximab antibodies.](#)

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<b>Affinity</b>	The monovalent intrinsic affinity of HCA221 was measured as $K_D=1.7$ nM by real time, label free molecular interaction analysis on immobilized cetuximab.
<b>ELISA</b>	This product may be used in a direct ELISA or as a bridging reagent in ADA assays. Following HRP-conjugation, this product can also be used as a detection reagent in a bridging ELISA for PK assay development together with <a href="#">HCA220</a> as the capture reagent. Protocol: <a href="#">PK bridging ELISA to measure free drug</a> Protocol: <a href="#">ADA bridging ELISA</a>
<b>Further Reading</b>	1. Gomez, D. <i>et al.</i> (2013) Cetuximab therapy in the treatment of metastatic colorectal cancer: the future frontier? <a href="#">Int J Surg. 11 (7): 507-13.</a>
<b>Storage</b>	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. 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.
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	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.
<b>Health And Safety Information</b>	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>
<b>Licensed Use</b>	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.
<b>Regulatory</b>	For research purposes only
<b>Technical Advice</b>	Recommended protocols 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

[HUMAN ANTI CETUXIMAB \(HCA220\)](#)

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

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

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