

Datasheet: HCA220

Description:	HUMAN ANTI CETUXIMAB
Specificity:	CETUXIMAB
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD19834
Isotype:	HuCAL Fab monovalent
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 *E. coli*. The antibody is tagged with a DYKDDDDK tag and a HIS-tag (HHHHHH) at the C-terminus of the antibody heavy chain. This antibody is supplied as a liquid.

Preparation

Metal chelate affinity chromatography

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.01% Thiomersal

Approx. Protein Concentrations

Total protein concentration 0.5 mg/ml

Immunogen

Cetuximab.

Specificity

Human Anti-Cetuximab Antibody, clone AbD19834, is an anti-idiotypic antibody that binds specifically to cetuximab and inhibits the binding of the drug to its target, epidermal

growth factor receptor (EGFR). It can be used in bioanalytical assays to measure the levels of cetuximab and biosimilar products in preclinical research and clinical trials.

Clone AbD19834 is recommended as the capture antibody in a pharmacokinetic (PK) bridging ELISA. When paired with another inhibitory antibody, HRP conjugated Anti-Cetuximab Antibody clone AbD19830_hlgG1 ([HCA221P](#)), as detection antibody, free drug can be measured. When paired with the non-inhibitory Anti-Cetuximab Antibody, clone AbD19376_hlgG1 ([HCA228P](#)), free and partially bound drug can be measured, which is equivalent to total drug when trough serum levels are above 4 µg/ml.

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 is directed against EGFR and inhibits tumor cell proliferation by blocking the interaction of epidermal growth factor (EGF) with its receptor.

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

Affinity	The monovalent intrinsic affinity of this antibody is $K_D = 0.5$ nM as measured by real time, label free molecular interaction analysis on immobilized cetuximab.
ELISA	This product may be used in a direct ELISA or as a coating antibody in PK bridging assays together with HRP-conjugated HCA221 or HCA228 as the detection reagent. Protocol: PK bridging ELISA to measure free drug .
Further Reading	1. Gomez, D. <i>et al.</i> (2013) Cetuximab therapy in the treatment of metastatic colorectal cancer: the future frontier? Int J Surg. 11 (7): 507-13.
Storage	<p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
Guarantee	12 months from date of despatch
Acknowledgements	<p>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.</p> <p>Erbitux is a trademark of ImClone LLC, a wholly-owned subsidiary of Eli Lilly and Company.</p> <p>His-tag is a trademark of EMD Biosciences.</p>
Health And Safety Information	Material Safety Datasheet documentation #10094 available at: 10094: https://www.bio-rad-antibodies.com/uploads/MSDS/10094.pdf
Licensed Use	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.

Regulatory For research purposes only

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

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](#)
Goat Anti Human IgG F(ab')₂ (STAR126...) [HRP](#)
Rabbit Anti Synthetic Peptide DYKDDDDK TAG (AHP1074...) [HRP](#)
Mouse Anti Synthetic Peptide HISTIDINE TAG (MCA1396...) [Alk. Phos.](#), [Biotin](#)

Recommended Useful Reagents

[HUMAN ANTI CETUXIMAB \(HCA228\)](#)
[HUMAN ANTI CETUXIMAB \(HCA221\)](#)
[HISPEC ASSAY DILUENT \(BUF049A\)](#)
[MOUSE ANTI HUMAN IgG \(Fc\) CH2 DOMAIN:HRP \(MCA647P\)](#)
[LYNX RAPID HRP ANTIBODY CONJUGATION KIT \(LNK002P\)](#)

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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
'M407523:221007'

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