

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_hIgG1 ([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 was measured as $K_D = 0.5$ nM 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	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.
Guarantee	12 months from date of despatch
Acknowledgements	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. Erbitux® is a registered trademark of ImClone LLC, a wholly-owned subsidiary of Eli Lilly and Company. His-tag is a registered trademark of EMD Biosciences.
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 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 and further information about HuCAL recombinant antibody technology can be found in the HuCAL Antibodies Technical Manual

Related Products

Recommended Secondary Antibodies

Mouse Anti Synthetic Peptide HISTIDINE TAG (MCA5995...) [HRP](#)

Rabbit Anti Synthetic Peptide DYKDDDDK TAG (AHP1074...) [HRP](#)

Goat Anti Synthetic Peptide HISTIDINE TAG (AHP1656...) [Biotin](#)
Rat Anti Synthetic Peptide DYKDDDDK TAG (MCA4764...) [HRP](#)
Mouse Anti Synthetic Peptide HISTIDINE TAG (MCA1396...) [Alk. Phos.](#), [Biotin](#)
Goat Anti Human IgG F(ab')₂ (STAR126...) [HRP](#)

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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'M371645:200612'

Printed on 11 Aug 2020

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