

Datasheet: HCA270

Description:	HUMAN ANTI TRASTUZUMAB
Specificity:	TRASTUZUMAB
Other names:	HERCEPTIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD18018_hlgG4_Pro
Isotype:	IgG4
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	Human IgG4 antibody selected from the HuCAL® phage display library and expressed in a human cell line - 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	Trastuzumab
Specificity	Human anti trastuzumab, clone AbD18018_hlgG4_Pro , is a paratope specific, high affinity, anti-idiotypic antibody that specifically recognizes the monoclonal antibody drug

trastuzumab and inhibits it binding to its target. It is a fully human recombinant monoclonal antibody with IgG4 isotype. The antibody can be used to measure the levels of trastuzumab and biosimilar products in bioanalytical assays.

Anti-trastuzumab antibody clone AbD18018 has been converted to human IgG4 isotype to offer assay developers increased flexibility in assay design. When used as an ELISA detection antibody, a secondary anti-human IgG4 antibody is required, which can be labeled according to the requirements of the user's preferred assay platform.

The antibody can be used to develop a pharmacokinetic (PK) bridging assay to measure free drug in preclinical research and clinical trials using patient sera. Antibody clones AbD16712 ([HCA166](#)) or AbD18141 ([HCA169](#)), both monovalent Fab format, are recommended as the capture antibody. Detection can be performed using clone AbD18018_hIgG4_Pro and an HRP conjugated anti-human IgG4 secondary antibody ([MCA2098P](#)).

This clone is also available as an IgG1 isotype in both a purified unconjugated format ([HCA177](#)) and directly conjugated to HRP ([HCA177P](#)).

Trastuzumab, also known as Herceptin®, is a drug used in the treatment of HER2 positive breast cancer and other HER2 over-expressing cancers including HER2-positive metastatic cancers of the gastrointestinal tract. Trastuzumab binds to the HER2 (or c-erbB2) proto-oncogene, an EGF receptor-like protein found on 20-30% of breast cancer cells. The binding leads to antibody mediated (complement mediated) killing of the HER2 positive cells.

[View a summary of all anti-trastuzumab antibodies](#)

Affinity	The monovalent intrinsic affinity of this antibody was measured as $K_D=0.02$ nM by real time, label-free molecular interaction analysis on immobilized trastuzumab.
ELISA	This product may be used as a detection reagent in a sandwich ELISA together with an HRP conjugated anti human IgG4 secondary antibody (MCA2098P) and HCA169 as the capture reagent. Protocol: In preparation.
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	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.

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 Human IgG4 (MCA2098...) [HRP](#)

Recommended Useful Reagents

[HUMAN ANTI TRASTUZUMAB \(HCA169\)](#)

[HUMAN ANTI TRASTUZUMAB \(HCA177\)](#)

[HUMAN ANTI TRASTUZUMAB:HRP \(HCA177P\)](#)

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

[HUMAN ANTI TRASTUZUMAB \(HCA166\)](#)

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