

# Datasheet: HCA263 BATCH NUMBER 151227

Description:	HUMAN ANTI TRASTUZUMAB (DRUG/TARGET COMPLEX)		
Specificity:	TRASTUZUMAB DRUG/TARGET COMPLEX		
Other names:	HERCEPTIN®		
Format:	Purified		
Product Type:	Monoclonal Antibody		
Clone:	AbD25279		
Isotype:	HuCAL Fab bivalent		
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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 bivalent human recombinant Fab (lambda light chain) selected from the HuCAL® phage display library, expressed in *E. coli*. This Fab fragment is bivalent by dimerization of the bacterial alkaline phosphatase fusion protein. The antibody is tagged with a DYKDDDDK tag and a HIS-tag (HHHHHH) at the C-terminus of the antibody heavy chain.

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	Trastuzumab		

# Specificity Human a antibody extracellu as ErbB2 used in p has been the level

Human anti trastuzumab drug/target complex, clone AbD25279, is a bivalent Fab antibody that specifically recognizes trastuzumab when in a complex with its target, the extracellular domain of the human epidermal growth factor receptor 2 (HER2, also known as ErbB2). It does not recognize the free drug or unbound HER2. The antibody can be used in pharmacokinetic (PK) antigen capture format assays to measure trastuzumab that has been captured via immobilized HER2. It is ideal for bioanalytical assays to measure the level of drug or biosimilar in complex with the HER2 target.

Trastuzumab (trade name Herceptin®) is a drug used in the treatment of HER2 positive breast cancer and other HER2 overexpressing 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  $K_D$ =31 nM by real time, label-free molecular interaction analysis on immobilized trastuzumab/ErbB2 complex.

### **ELISA**

This product may be used as a detection reagent in a direct or an indirect ELISA for trastuzumab captured by immobilized human ErbB2.

Protocol: PK antigen capture ELISA to measure bound drug exclusively

### References

1. Harth, S. *et al.* (2019) Generation by phage display and characterization of drug-target complex-specific antibodies for pharmacokinetic analysis of biotherapeutics. <u>MAbs. 11 (1):</u> 178-190.

### **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.

His-tag is a registered trademark of EMD Biosciences.

## Health And Safety Information

Material Safety Datasheet documentation #10094 available at: https://www.bio-rad-antibodies.com/SDS/HCA263

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### **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 <u>HuCAL Antibodies Technical Manual</u>

### **Related Products**

### **Recommended Useful Reagents**

HISPEC ASSAY DILUENT (BUF049A)

MOUSE ANTI PENTA HISTIDINE TAG:HRP (MCA5995P)

LYNX RAPID HRP ANTIBODY CONJUGATION KIT (LNK002P)

RAT ANTI DYKDDDDK TAG:HRP (MCA4764P)

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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 'M371696:200612'

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