

Datasheet: HCA248G

BATCH NUMBER 157731

Description:	HUMAN ANTI NATALIZUMAB
Specificity:	NATALIZUMAB
Other names:	TYSABRI®
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD21375
Isotype:	HuCAL Fab monovalent
Quantity:	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 (kappa 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

Antibody concentration 1.0 mg/ml

Immunogen

Natalizumab

Specificity **Human Anti-Natalizumab Antibody, clone AbD21375** is a paratope specific, anti-idiotypic antibody that specifically recognizes free natalizumab but not free human alpha-4/beta-1 integrin or the drug/integrin complex. It inhibits the binding of natalizumab to its target and can be used to measure levels of free natalizumab and biosimilar products in bioanalytical and patient monitoring assays.

A pair of anti-natalizumab antibodies can be used to develop a pharmacokinetic (PK) bridging assay to measure free drug. This antibody, in monovalent Fab format, is recommended as a capture antibody, paired with an HRP conjugated Anti-Natalizumab Antibody in full immunoglobulin format, clone AbD21375_hlgG1 ([HCA249](#)) as the detection antibody.

Natalizumab (Tysabri) is a humanized IgG4/kappa monoclonal antibody approved as a monotherapy for the treatment of relapsing forms of multiple sclerosis and for the treatment of Crohn's disease. It is directed against alpha-4 integrin (CD49d), and binds to alpha-4/beta-1 integrin on the surface of circulating leucocytes, except neutrophils. It is believed to act by blocking the interaction of alpha-4/beta-1 integrin with vascular cell adhesion molecule-1 (VCAM-1), preventing the adherence and transport of inflammatory immune cells across the intestinal lining and blood-brain barrier.

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

Affinity	The monovalent intrinsic affinity of this antibody was measured as $K_D = 2.1$ nM by real time, label free molecular interaction analysis on immobilized natalizumab.
ELISA	This product may be used in either a direct ELISA or indirect ELISA both as a capture reagent and as a detection reagent. Protocol: PK bridging ELISA to measure free drug
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. Tysabri® is a registered trademark Biogen Idec and Elan. 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/HCA248G10094
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 Useful Reagents

[RAT ANTI DYKDDDDK TAG:HRP \(MCA4764P\)](#)

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

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

[MOUSE ANTI PENTA HISTIDINE TAG:HRP \(MCA5995P\)](#)

[HUMAN ANTI NATALIZUMAB \(HCA249\)](#)

[HUMAN ANTI NATALIZUMAB \(HCA250\)](#)

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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
'M371675:200612'

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