Datasheet: HCA197

Description:	HUMAN ANTI HUMAN HbA1c
Specificity:	HbA1c
Other names:	HEMOGLOBIN A1C
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AbD15783-IgG
Isotype:	IgG1
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.

Target Species

Human

Product Form

Human IgG1 antibody selected from the HuCAL® phage display library and expressed in a human cell line.This antibody is supplied as a liquid.

Preparation

Purified IgG prepared by affinity chromatography on Protein A

Buffer Solution

Phosphate buffered saline.

Preservative Stabilisers

0.01% Thiomersal

Approx. Protein Concentrations

Total protein concentration 0.5 mg/ml.

Immunogen

The immunogens used in the generation of this antibody were:
A glycated peptide, corresponding to N-terminal 9 amino acids of haemoglobin beta chain coupled to the carrier proteins BSA and TRF.
Purified HbA1c.

External Database Links

UniProt:
P68871 Related reagents

	Entrez Gene: 3043 HBB Related reagents
Specificity	**Human anti Human HbA1c antibody, clone AbD15783-IgG** recognizes HbA1c, hemoglobin glycated at the N-terminal valine of the hemoglobin β chain. It does not bind to non-glycated hemoglobin. Besides binding to the normal glycated hemoglobin, Human anti Human HbA1c antibody, clone AbD15783-IgG also recognizes the glycated hemoglobin variants HbC, HbE, HbD and to a lesser degree HbS. Elevated HbF is not detected due to the absence of the hemoglobin β chain. The measurement of HbA1c levels is used to identify the average plasma glucose concentration. In diabetes mellitus, higher levels of HbA1c have been associated with cardiovascular disease and other diseases. Levels of more than 6.5% HbA1c (48 mmol/mol) are used as a criterion to diagnose diabetes. This antibody is also available in a Fab format (HCA179).
Affinity	The affinity of this antibody, as a monovalent fab measured against the immunogen, was measured as K_D=19 nM by real time, label-free molecular interaction analysis using HbA1c-BSA and HbA1c-TRF conjugates as immobilized antigen. The affinity of this antibody, as a monovalent fab measured against purified HbA1c, was measured as K_D=58 nM by real time, label-free molecular interaction analysis using full length HbA1c as immobilized antigen
Storage	Store at +4^{o}C or at -20^{o}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.
Shelf Life	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.
Health And Safety Information	Material Safety Datasheet documentation #10094 available at https://www.bio-rad-antibodies.com/uploads/MSDS/10094.pdf
Licensed Use	For in vitro research purposes only, unless otherwise specified in writing by 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

HUMAN ANTI HUMAN HbA1c (HCA179)
HUMAN ANTI HUMAN HbA1c (HCA180)

HUMAN ANTI HUMAN HbA1c (HCA181)
HUMAN ANTI HUMAN HbA1c (HCA217)
HUMAN ANTI HUMAN HbA1c (HCA218)
HUMAN ANTI HUMAN HbA1c (HCA219)
HUMAN ANTI HUMAN HbA1c (HCA200)
HUMAN ANTI HUMAN HbA1c (HCA179)
HUMAN ANTI HUMAN HbA1c (HCA180)
HUMAN ANTI HUMAN HbA1c (HCA181)
HUMAN ANTI HUMAN HbA1c (HCA217)
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