

Datasheet: HCA195G BATCH NUMBER 150377

Description:	RECOMBINANT HUMAN IgG4 KAPPA		
Name:	HUMAN IgG4 KAPPA		
Format:	Purified		
Product Type:	Recombinant Protein		
Clone:	AbD18705_hlgG4		
Isotype:	IgG4 Kappa		
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

Human IgG4 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

Antibody concentration 1.0 mg/ml

Immunogen

Green fluorescent protein.

External Database

Links

UniProt:

P01834 Related reagents

P01861 Related reagents

Entrez Gene:

3514 IGKC Related reagents
3503 IGHG4 Related reagents

Specificity

Recombinant Human IgG4 kappa, AbD18705_hlgG4 is a recombinant human IgG4 antibody with a kappa light chain.

AbD18705_hlgG4 is specific for green fluorescent protein (GFP) and has no known reactivity with mammalian proteins or other antigens. This product is recommended for use as a standard in assays designed to measure lgG4 levels, or as a control antibody when using other human antibodies of the same isotype and subclass.

In addition to the tetrameric IgG structure, composed of two copies each of the heavy and light chains, human IgG4 forms so-called half-molecules. This species contains only one heavy and one light chain. Half-molecules can assemble with an unrelated half-molecule to form bispecific tetrameric antibody species (<u>Aalberse et al. 2002</u>). Half-molecules of human IgG4 preparations can be detected as an additional species under denaturing, non-reducing conditions using SDS-PAGE, size exclusion chromatography or capillary electrophoresis.

Mutation in the core hinge region of IgG4 prevents the formation of half-molecules (<u>Bloom et al. 1997</u>). In addition to the wild type recombinant, Bio-Rad also offers recombinant Human IgG4 kappa in its mutated form (<u>HCA247</u>). Recombinant Human IgG4 lambda is also available in both wild type (<u>HCA050</u>) and mutant form (<u>HCA246</u>).

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.

Health And Safety Information

Material Safety Datasheet documentation #10094 available at:

https://www.bio-rad-antibodies.com/SDS/HCA195G

10094

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

Related Products

Recommended Useful Reagents

RECOMBINANT HUMAN IgG4 LAMBDA (HCA050)
RECOMBINANT HUMAN IgG4 LAMBDA (MUTANT) (HCA246)
RECOMBINANT HUMAN IgG4 KAPPA (MUTANT) (HCA247)

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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 'M371609:200612'

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