

# Datasheet: MCA647G BATCH NUMBER 158829

Description:	MOUSE ANTI HUMAN IgG (Fc) CH2 DOMAIN
Specificity:	IgG (Fc) (CH2 DOMAIN)
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	MK 1 A6
Isotype:	lgG1
Quantity:	0.2 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
Flow Cytometry			•	
Immunohistology - Frozen (1)	•			
Immunohistology - Paraffin		•		
ELISA	•			1/1,000 - 1/10,000
Immunoprecipitation			•	
Western Blotting				

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.

Target Species	Human	
Species Cross Reactivity	Reacts with: Rhesus Monkey  N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications of personal communications from the originators. Please refer to references indicated further information.	
Product Form	Purified IgG - liquid	

Preparation	Purified IgG prepared by affinity chromatography on Protein A			
Buffer Solution	Phosphate buffered saline			
Preservative Stabilisers	0.09% Sodium Azide			
Carrier Free	Yes			
Approx. Protein Concentrations	IgG concentration 1.0mg/ml			
Immunogen	Human IgG Polyclonal.			
External Database Links	UniProt:  P01857 Related reagents P01859 Related reagents P01861 Related reagents P01834 Related reagents P01860 Related reagents P0CG04 Related reagents  P0CG04 Related reagents  Entrez Gene:  3500 IGHG1 Related reagents 3501 IGHG2 Related reagents 3502 IGHG3 Related reagents 3502 IGHG3 Related reagents 3503 IGHG4 Related reagents 3514 IGKC Related reagents 28815 IGLV2-14 Related reagents			
RRID	AB_321910			
Fusion Partners	Spleen cells from BALB/c mouse were fused with cells from the mouse NS1 myeloma cell line.			
Specificity	Mouse anti Human IgG (Fc) CH2 domain, clone MK 1 A6 recognizes human IgG Fc (all subclasses).			
	CH2 and hinge regions have an important role in effector functions of IgG. The epitope detected by clone MK 1 A6 lies within the CH2 domain as determined by haemagglutination and western blotting using IgG heavy chain and myelomas with defined domain deletions.			
References	<ol> <li>Lund, J. et al. (1996) Multiple interactions of IgG with its core oligosaccharide can modulate recognition by complement and human Fc gamma receptor I and influence the synthesis of its oligosaccharide chains. <u>J Immunol. 157 (11): 4963-9.</u></li> <li>Wozniak-Knopp, G. et al. (2010) Introducing antigen-binding sites in structural loops of</li> </ol>			

immunoglobulin constant domains: Fc fragments with engineered HER2/neu-binding sites and antibody properties. Protein Eng Des Sel. 23: 289-97.

- 3. Raghuraman, S. *et al.* (2012) Spontaneous clearance of chronic hepatitis C virus infection is associated with appearance of neutralizing antibodies and reversal of T-cell exhaustion. <u>J Infect Dis. 205: 763-71.</u>
- 4. Hasenhindl, C. *et al.* (2013) Stability assessment on a library scale: a rapid method for the evaluation of the commutability and insertion of residues in C-terminal loops of the CH3 domains of IgG1-Fc. Protein Eng Des Sel. 26 (10): 675-82.
- 5. Rasti, N. *et al.* (2006) Nonimmune immunoglobulin binding and multiple adhesion characterize Plasmodium falciparum-infected erythrocytes of placental origin. <u>Proc Natl Acad Sci U S A. 103: 13795-800</u>.
- 6. Traxlmayr, M.W. *et al.* (2014) Construction of pH-sensitive Her2-binding IgG1-Fc by directed evolution. Biotechnol J. 9: 1013-22.

#### 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
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA647G">https://www.bio-rad-antibodies.com/SDS/MCA647G</a> 10040
Regulatory	For research purposes only

## Related Products

## **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...)

Goat Anti Mouse IgG IgA IgM (STAR87...)

RPE
Goat Anti Mouse IgG (STAR76...)

RPE
Rabbit Anti Mouse IgG (STAR13...)

HRP
Goat Anti Mouse IgG (STAR70...)

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

Worldwide

DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

Rabbit Anti Mouse IgG (STAR9...) <u>FITC</u>
Goat Anti Mouse IgG (STAR77...) <u>HRP</u>

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody\_sales\_us@bio-rad.com

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody\_sales\_uk@bio-rad.com

Europe Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Email: antibody\_sales\_de@bio-rad.com

## Printed on 19 Jan 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint