

## Datasheet: MCA647G

**BATCH NUMBER 172461**

<b>Description:</b>	MOUSE ANTI HUMAN IgG (Fc) CH2 DOMAIN
<b>Specificity:</b>	IgG (Fc) (CH2 DOMAIN)
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MK 1 A6
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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 [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	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.**

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

<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>Immunogen</b>	Human IgG Polyclonal.
<b>External Database Links</b>	<p><b>UniProt:</b></p> <p><a href="#">P01857</a>      <a href="#">Related reagents</a></p> <p><a href="#">P01859</a>      <a href="#">Related reagents</a></p> <p><a href="#">P01861</a>      <a href="#">Related reagents</a></p> <p><a href="#">P01834</a>      <a href="#">Related reagents</a></p> <p><a href="#">P01860</a>      <a href="#">Related reagents</a></p> <p><a href="#">P0CG04</a>      <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">3500</a>    IGHG1      <a href="#">Related reagents</a></p> <p><a href="#">3501</a>    IGHG2      <a href="#">Related reagents</a></p> <p><a href="#">3502</a>    IGHG3      <a href="#">Related reagents</a></p> <p><a href="#">3503</a>    IGHG4      <a href="#">Related reagents</a></p> <p><a href="#">3514</a>    IGKC        <a href="#">Related reagents</a></p> <p><a href="#">28815</a>   IGLV2-14   <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_321910
<b>Fusion Partners</b>	Spleen cells from BALB/c mouse were fused with cells from the mouse NS1 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human IgG (Fc) CH2 domain, clone MK 1 A6</b> recognizes human IgG Fc (all subclasses).</p> <p>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.</p>
<b>References</b>	1. Lund, J. <i>et al.</i> (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. <a href="#">J Immunol. 157 (11): 4963-9.</a>

2. Rasti, N. *et al.* (2006) Nonimmune immunoglobulin binding and multiple adhesion characterize Plasmodium falciparum-infected erythrocytes of placental origin. [Proc Natl Acad Sci U S A. 103: 13795-800.](#)
3. Wozniak-Knopp, G. *et al.* (2010) Introducing antigen-binding sites in structural loops of immunoglobulin constant domains: Fc fragments with engineered HER2/neu-binding sites and antibody properties. [Protein Eng Des Sel. 23: 289-97.](#)
4. 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. [J Infect Dis. 205: 763-71.](#)
5. 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.](#)
6. Traxlmayr, M.W. *et al.* (2014) Construction of pH-sensitive Her2-binding IgG1-Fc by directed evolution. [Biotechnol J. 9: 1013-22.](#)
7. Bali, N. *et al.* (2022) Sticks and Stones, a conserved cell surface ligand for the Type IIa RPTP Lar, regulates neural circuit wiring in *Drosophila*. [Elife. 11: e71469.](#)
8. Amanatidou, D. *et al.* (2025) Increased Concentration of Anti-Egg Albumin Antibodies in Cerebrospinal Fluid and Serum of Patients with Alzheimer's Disease-Discussion on Human Serpins' Similarity and Probable Involvement in the Disease Mechanism. [Biomolecules. 15 \(8\): 1085](#)

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**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA647G>

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**Regulatory** For research purposes only

## Related Products

### Recommended Secondary Antibodies

- Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)
- Goat Anti Mouse IgG (STAR70...) [FITC](#)
- Goat Anti Mouse IgG (STAR77...) [HRP](#)
- Goat Anti Mouse IgG (STAR76...) [RPE](#)
- Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#), [DyLight®650](#), [DyLight®680](#), [DyLight®800](#), [FITC](#), [HRP](#)
- Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
- Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

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

### **Recommended Negative Controls**

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)

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