

# Datasheet: MCA647P

Description:	MOUSE ANTI HUMAN IgG (Fc) CH2 DOMAIN:HRP
Specificity:	IgG (Fc) (CH2 DOMAIN)
Format:	HRP
<b>Product Type:</b>	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
Immunohistology - Frozen (1)	•			1/100 - 1/200
Immunohistology - Paraffin		•		
ELISA	-			1/1000 - 1/10000
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. Suggested working dilutions are given as a guide only. 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 or personal communications from the originators. Please refer to references indicated for further information.
Product Form	Purified IgG conjugated to Horseradish Peroxidase (HRP) - liquid
Preparation	Purified IgG prepared by affinity chromatography on Prosep A from tissue culture

## supernatant

Buffer Solution	Phosphate buffered saline			
Preservative Stabilisers	0.0095% MIT			
Approx. Protein Concentrations	IgG concentration 1.0 mg/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			
	Entrez Gene:			
	3500 IGHG1 Related reagents			
	3501 IGHG2 Related reagents			
	3502 IGHG3 Related reagents			
	3503 IGHG4 Related reagents			
	3514 IGKC Related reagents			
	28815 IGLV2-14 Related reagents			
RRID	AB_321911			
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 (a 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>Rasti, N. et al. (2006) Nonimmune immunoglobulin binding and multiple adhesion characterize Plasmodium falciparum-infected erythrocytes of placental origin. <u>Proc Natl</u></li> </ol>			

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.

#### **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 #20479 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA647P">https://www.bio-rad-antibodies.com/SDS/MCA647P</a> 20479
Regulatory	For research purposes only

## Related Products

TMB SIGNAL+ (BUF054A)

### **Recommended Useful Reagents**

AbGUARD® HRP STABILIZER PLUS (BUF052A) AbGUARD® HRP STABILIZER PLUS (BUF052B) AbGUARD® HRP STABILIZER PLUS (BUF052C) TMB CORE (BUF056A) TMB CORE+ (BUF062A)

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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 'M437611:250317'

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