

## Datasheet: MCA508G BATCH NUMBER 159737

Description:	MOUSE ANTI HUMAN COMPLEMENT FACTOR H		
Specificity:	COMPLEMENT FACTOR H		
Other names:	H FACTOR 1		
Format:	Purified		
Product Type:	Monoclonal Antibody		
Clone:	OX-23		
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	-						
	information. For general	information. For general protocol recommendations, please visit <u>www.bio-</u>						
	rad-antibodies.com/protocols.							
		Yes	No	Not Determined	Suggested Dilution			
	Flow Cytometry			•				
	Immunohistology - Frozen							
	Immunohistology - Paraffin							
	ELISA				1/50 - 1/200			
	Immunoprecipitation	•						
	Western Blotting							
	Dealt diamagnetic and a second							
	Radioimmunoassays Where this antibody has necessarily exclude its us			•	•			
	Where this antibody has	se in sucl nended th	h procedu nat the use	res. Suggested workin er titrates the antibody	ng dilutions are given as			
Target Species	Where this antibody has necessarily exclude its us a guide only. It is recomm	se in sucl nended th	h procedu nat the use	res. Suggested workin er titrates the antibody	ng dilutions are given as			
	Where this antibody has necessarily exclude its us a guide only. It is recomm system using appropriate	se in sucl nended th negative	h procedu nat the use	res. Suggested workin er titrates the antibody	ng dilutions are given as			
Target Species Species Cross Reactivity	Where this antibody has necessarily exclude its us a guide only. It is recomm system using appropriate Human	se in such nended th negative use	h procedu nat the use e/positive e	res. Suggested workin er titrates the antibody controls.	ng dilutions are given as			
Species Cross	Where this antibody has necessarily exclude its us a guide only. It is recomm system using appropriate Human Reacts with: Primate, Mo	se in sucl nended th negative use use p, Rabbi	h procedu nat the use e/positive o t, Bovine,	res. Suggested workin er titrates the antibody controls. Chicken, Pig	ng dilutions are given as			
Species Cross	Where this antibody has necessarily exclude its us a guide only. It is recommon system using appropriate Human Reacts with: Primate, Mo Does not react with:Shee	se in such nended th negative use p, Rabbi and worki	h procedu nat the use e/positive o t, Bovine, ng conditi	res. Suggested workin er titrates the antibody controls. Chicken, Pig ons may vary betweer	ng dilutions are given as for use in their own n species. Cross			
Species Cross	<ul> <li>Where this antibody has necessarily exclude its us a guide only. It is recomm system using appropriate</li> <li>Human</li> <li>Reacts with: Primate, Mo Does not react with:Shee</li> <li>N.B. Antibody reactivity a reactivity is derived from</li> </ul>	se in sucl nended th negative use p, Rabbi and worki testing w	h procedu nat the use e/positive o t, Bovine, ng conditi ithin our la	res. Suggested workin er titrates the antibody controls. Chicken, Pig ons may vary betweer aboratories, peer-revie	ng dilutions are given as for use in their own n species. Cross wed publications or			
Species Cross	Where this antibody has necessarily exclude its us a guide only. It is recomm system using appropriate Human Reacts with: Primate, Mo Does not react with:Shee <b>N.B.</b> Antibody reactivity a	se in sucl nended th negative use p, Rabbi and worki testing w	h procedu nat the use e/positive o t, Bovine, ng conditi ithin our la	res. Suggested workin er titrates the antibody controls. Chicken, Pig ons may vary betweer aboratories, peer-revie	ng dilutions are given as for use in their own n species. Cross wed publications or			

Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant				
Buffer Solution	Phosphate buffered saline				
Preservative Stabilisers	0.09% Sodium Azide				
Carrier Free	Yes				
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml				
Immunogen	Human complement factor H.				
External Database Links	UniProt: <u>P08603</u> <u>Related reagents</u> Entrez Gene:				
	3075 CFH Related reagents				
Synonyms	HF, HF1, HF2				
RRID	AB_2080129				
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the NS-O mouse myeloma cell line.				
Specificity	<b>Mouse anti Human Complement Factor H antibody, clone OX-23</b> recognizes intact human serum complement protein factor H, also known as H factor 1. Complement factor H is a 1213 amino acid ~155 kDa secreted glycoprotein bearing multiple disulphide bonds and is involved in the deactivation of C3b and dissociation of C3 convertase in the alternative complement pathway. Mouse anti Human Complement Factor H antibody, clone OX-23 also recognizes a ~43-49 kDa truncated form of factor H present at low level (1-5ug/ml) in plasma and urine.				
	Mutations in the CFH gene can lead to the development of Complement Factor H deficiency ( <u>CFHD</u> ) which can be asymptomatic, present with recurrent bacterial infections or renal failure ( <u>Ault <i>et al.</i> 1997</u> ). Mutations can also lead to development of Basal laminar drusen ( <u>BLD</u> ), the deposition of extracellular deposits accumulating below the retinal pigment epithelium on Bruch membrane which can ultimately lead to vision loss ( <u>Boon <i>et al.</i> 2008</u> ). Additionally, mutations in the CFH gene can lead to increased susceptibility to Hemolytic uremic syndrome atypical 1 ( <u>AHUS1</u> ) or Macular degeneration, age-related, 4 ( <u>ARMD4</u> ).				
	Mouse anti Human Complement Factor H antibody, clone OX-23 has been used successfully for the determination of levels of bound murine factor H in a sandwich ELISA (Daniels-Treffandier <i>et al.</i> 2016).				

References	<ol> <li>Alsenz, J. <i>et al.</i> (1985) Structural and functional analysis of the complement component factor H with the use of different enzymes and monoclonal antibodies to factor H. <u>Biochem J. 232 (3): 841-50.</u></li> <li>Fontaine, M. <i>et al.</i> (1989) Truncated forms of human complement factor H. <u>Biochem J. 258 (3): 927-30.</u></li> <li>Daniels-Treffandier, H. <i>et al.</i> (2016) Impact of Reducing Complement Inhibitor Binding on the Immunogenicity of Native <i>Neisseria meningitidis</i> Outer Membrane Vesicles. <u>PLoS One. 11 (2): e0148840.</u></li> <li>Kelly, U. <i>et al.</i> (2010) Heparan sulfate, including that in Bruch's membrane, inhibits the complement alternative pathway: implications for age-related macular degeneration. J Immunol. 185 (9): 5486-94.</li> <li>Smith J <i>et al.</i> (2007) Genes expressed by both mesangial cells and bone marrow-derived cells underlie genetic susceptibility to crescentic glomerulonephritis in the rat. J Am Soc Nephrol. 18 (6): 1816-23.</li> <li>Clark, S.J. <i>et al.</i> (2014) Identification of factor H-like protein 1 as the predominant complement regulator in Bruch's membrane: implications for age-related macular degeneration. J Immunol. 193 (10): 4962-70.</li> <li>Martínez, A. <i>et al.</i> (2019) Clinical and Immunological Profile of Anti-factor H Antibody Associated Atypical Hemolytic Uremic Syndrome: A Nationwide Database. <u>Front Immunol.</u> 10: 1282.</li> </ol>
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: https://www.bio-rad-antibodies.com/SDS/MCA508G 10040
Regulatory	For research purposes only

## **Related Products**

## **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (STAR77)	HRP		
Rabbit Anti Mouse IgG (STAR12)	<u>RPE</u>		
Goat Anti Mouse IgG IgA IgM (STAR87) Alk. Phos., HRP			
Goat Anti Mouse IgG (STAR76)	<u>RPE</u>		
Goat Anti Mouse IgG (Fc) (STAR120)	<u>FITC, HRP</u>		
Rabbit Anti Mouse IgG (STAR13)	<u>HRP</u>		

Goat Ant	Goat Anti Mouse IgG (STAR70) <u>FITC</u>						
Goat Ant	t Anti Mouse IgG (H/L) (STAR117) <u>Alk. Phos.</u> , <u>DyLight®488</u> , <u>DyLight®550</u> ,						
	DyLight®650, DyLight®680, DyLight®800,						
		<u>FITC</u> , <u>HRP</u>					
Rabbit A	Rabbit Anti Mouse IgG (STAR9) <u>FITC</u>						
Recomm	Recommended Negative Controls						
MOUSE IgG1 NEGATIVE CONTROL (MCA928)							
North & South	Tel: +1 800 265 7376 Wor	dwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21		
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50		
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bic	o-rad.com	Email: antibody_sales_de@bio-rad.com		
To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M384535:210513'							
Printed on 19 Jan 2024							

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