

Datasheet: MCA508G

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 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
Flow Cytometry			•	
Immunohistology - Frozen				
Immunohistology - Paraffin			•	
ELISA	•			1/50 - 1/200
Immunoprecipitation	•			
Western Blotting	•			
Radioimmunoassays				

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.

Target Species	Human
Species Cross Reactivity	Reacts with: Primate, Mouse Does not react with:Sheep, Rabbit, Bovine, Chicken, Pig
	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 - liquid

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: P08603 Related reagents 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	Mouse anti Human Complement Factor H antibody, clone OX-23 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		

Mutations in the CFH gene can lead to the development of Complement Factor H deficiency (CFHD) which can be asymptomatic, present with recurrent bacterial infections or renal failure (Ault et al. 1997). Mutations can also lead to development of Basal laminar drusen (BLD), the deposition of extracellular deposits accumulating below the retinal pigment epithelium on Bruch membrane which can ultimately lead to vision loss (Boon et al. 2008). Additionally, mutations in the CFH gene can lead to increased susceptibility to Hemolytic uremic syndrome atypical 1 (AHUS1) or Macular degeneration, age-related, 4 (ARMD4).

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 (<u>Daniels-Treffandier et al. 2016</u>).

References

- 1. Alsenz, J. *et al.* (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>
- 2. Fontaine, M. *et al.* (1989) Truncated forms of human complement factor H. <u>Biochem J.</u> 258 (3): 927-30.
- 3. Daniels-Treffandier, H. *et al.* (2016) Impact of Reducing Complement Inhibitor Binding on the Immunogenicity of Native *Neisseria meningitidis* Outer Membrane Vesicles. <u>PLoS One. 11 (2): e0148840.</u>
- 4. Kelly, U. *et al.* (2010) Heparan sulfate, including that in Bruch's membrane, inhibits the complement alternative pathway: implications for age-related macular degeneration. <u>J. Immunol. 185 (9): 5486-94.</u>
- 5. Smith J *et al.* (2007) Genes expressed by both mesangial cells and bone marrow-derived cells underlie genetic susceptibility to crescentic glomerulonephritis in the rat. <u>J Am Soc Nephrol. 18 (6): 1816-23.</u>
- 6. Clark, S.J. *et al.* (2014) Identification of factor H-like protein 1 as the predominant complement regulator in Bruch's membrane: implications for age-related macular degeneration. <u>J Immunol. 193 (10): 4962-70.</u>
- 7. Martínez, A. *et al.* (2003) Mapping of the Adrenomedullin-Binding Domains in Human Complement Factor H. <u>Hypertension Research. 26 (Suppl): S55-S59.</u>
- 8. Puraswani, M. *et al.* (2019) Clinical and Immunological Profile of Anti-factor H Antibody Associated Atypical Hemolytic Uremic Syndrome: A Nationwide Database. <u>Front Immunol.</u> 10: 1282.

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

Rabbit Anti Mouse IgG (STAR12...)

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

Goat Anti Mouse IgG (STAR76...)

Goat Anti Mouse IgG (STAR70...)

Rabbit Anti Mouse IgG (STAR13...)

HRP

Goat Anti Mouse IgG (Fc) (STAR120...)

FITC, HRP

Rabbit Anti Mouse IgG (STAR9...) FITC

Goat Anti Mouse IgG (STAR77...) HRP

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

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

FITC, HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M437675:250318'

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