

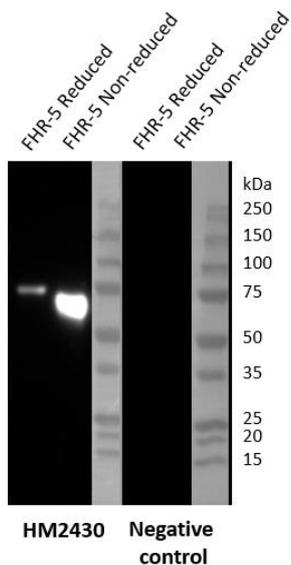
**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	FHR-5, Human, mAb 5.1		
<b>Catalog number</b>	HM2430-100UG		
<b>Lot number</b>	-	<b>Expiry date</b>	-
<b>Volume</b>	1 mL	<b>Amount</b>	100 µg
<b>Formulation</b>	0.2 µm filtered in PBS+0.02%NaN3+0.1%BSA	<b>Concentration</b>	100 µg/ml
<b>Host Species</b>	Mouse IgG1	<b>Conjugate</b>	None
<b>Endotoxin</b>	N/A	<b>Purification</b>	Protein G
<b>Storage</b>	4°C		

**Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #							1	-
Yes							•	•
No								
N.D.	•	•	•	•	•	•		

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



W: Western blot analysis performed with human FHR-5 protein with antibody 5.1 (HM2430) at 2 µg/ml .

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

- W: A non-reduced and/or reduced sample treatment and SDS-Page was used. The band sizes around ~65-75 kDa.

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## General Information

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<b>Description</b>	HM2430 (anti-FHR-5; clone 5.1) is a mouse monoclonal antibody recognizing human full length Complement Factor H-related protein 5 (FHR-5), a glycoprotein belonging to the family of complement regulatory proteins. It is synthesized and secreted primarily by the liver but also by immune cells such as monocytes, macrophages, and dendritic cells. FHR-5 has an approximate molecular weight of 65 kDa. Structurally, FHR-5 shares homology with Complement Factor H (CFH), a key regulator in the complement system. Also FHR-5 is part of the complement regulatory network, predominantly within the alternative pathway (AP) of the complement system. Many host ligands have been identified for FHR-5, such as C3b, heparin, CRP, PTX3 and components of the extracellular matrix. Various reports show that FHR-5 enhances the promotion of AP activation on cell surfaces. Surface-bound FHR-5 serves as a platform for the assembly of the AP C3 convertase. In addition, FHR-5 may compete with FH binding to certain surface ligands and inhibit FH regulatory activities. With regards to its role disease, (rare) genetic variants in the CFHR5 gene have been found in patients with atypical hemolytic uremic syndrome (aHUS) and age-related macular degeneration (AMD) and may contribute to the disease. In addition, circulating and glomerular FHR-5 associates with IgA nephropathy (IgAN) and familial C3 glomerulopathy (C3G). However, contradictory outcomes have been reported regarding FHR-5's involvement in these diseases and other genes may also play a role, emphasizing the need for further research.		
<b>Immunogen</b>	Human Complement factor H-related protein 5		
<b>Aliases</b>	CFHL5, CFHR5		
<b>Gene</b>	Gene name: CFHR5	Entrez Gene ID: <a href="#">81494</a>	Uniprot: <a href="#">Q9BXR6</a>
<b>Cross reactivity</b>	-		
<b>References</b>	<ol style="list-style-type: none"><li>1. Van Beek, AE, et al; Factor H-Related (FHR)-1 and FHR-2 Form Homo- and Heterodimers, while FHR-5 Circulates Only As Homodimer in Human Plasma, 2017, Front. Immunol. 8:1328. doi: <a href="#">10.3389/fimmu.2017.01328</a></li><li>2. Van Beek, AE ,et al; Reference Intervals of Factor H and Factor H-Related Proteins in Healthy Children, 2018, Front. Immunol. 9:1727. doi: <a href="#">10.3389/fimmu.2018.01727</a></li><li>3. Lorés-Motta, L, et al; Common haplotypes at the CFH locus and low-frequency variants in CFHR2 and CFHR5 associate with systemic FHR concentrations and age-related macular degeneration, 2021, Am J Hum Genet. 2021 Aug 5;108(8):1367-1384. doi: <a href="#">10.1016/j.ajhg.2021.06.002</a></li><li>4. Van Beek AE, et al; Low Levels of Factor H Family Proteins During Meningococcal Disease Indicate Systemic Processes Rather Than Specific Depletion by Neisseria meningitidis, 2022, Front. Immunol. 13:876776. doi: <a href="#">10.3389/fimmu.2022.876776</a></li></ol>		
<b>Storage&amp;stability</b>	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.		
<b>Precautions</b>	For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.		

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We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC

Date

Do you have any questions or comments regarding this product? Please contact us via [support@hycultbiotech.com](mailto:support@hycultbiotech.com).