CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	Ficolin-1, Human, clone 7G1		
Catalog number	HM2196-20UG		
Lot number	-	**Expiry date**	-
Volume	200 µl	**Amount**	20 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	**Concentration**	100 µg/ml
Host Species	Mouse IgG1	**Conjugate**	None
Endotoxin	N.A.	**Purification**	Protein G
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #						1,2		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

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.

General Information

Description

The monoclonal antibody 7G1 recognizes human Ficolin-1, also known as M-ficolin. Ficolins are a family of pattern recognition molecules containing both a collagen-like domain and a fibrinogen-like domain that are capable of activating the complement system, through association with MASPs, on the surface of microorganisms. In human, three Ficolins are known: Ficolin-1 (M-ficolin), Ficolin-2 (L-ficolin), and Ficolin-3 (H-ficolin). Ficolin-1, is mainly expressed by monocytes, granulocytes and lung cells and is present locally in areas of inflammation. However, it was recently also found in serum suggesting that Ficolin-1 also has a role in systemic immunity like Ficolin-2 and Ficolin-3. Functional analysis of Ficolin-1 has demonstrated that it's ligand is sialic acid present on bacteria since binding was abolished by prior treatment of the bacteria with sialidase. Furthermore, it was shown that Ficolin-1 facilitates the uptake of E. coli by a leukemic monocyte lymphoma cell line, suggesting that it functions as a phagocytic receptor on the surface of circulating monocytes. Low cord blood concentration of Ficolin-1 has been associated with higher necrotizing enterocolitis-associated fatality and two identified SNPs in the Ficolin-1 gene are associated with the development of rheumatoid arthritis. The monoclonal antibody 7G1 is suitable for use in immunoassays and western blotting.

Immunogen

Full length recombinant Ficolin-1

Aliases

M-ficolin, ficolin/P35-related

Cross reactivity

Ficolin-2: No; Ficolin-3; No

References

1. Wittenborn, T. et al; Characteristics and biological variations of M-Ficolin, a pattern recognition molecule, in plasma. J Innate Immun 2009, *2*: 167
2. Schlappbach, L. et al; M-ficolin in the neonatal period: Associations with need for mechanical ventilation and mortality in premature infants with necrotising enterocolitis. Molecular Biology 2009, *46*: 2597

Storage&stability

Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

Precautions 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.

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
Brenda Teunissen	14/07/2021

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.