

**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	MBL-C, Mouse, clone 16A8		
<b>Catalog number</b>	HM1037-100UG		
<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+0.1%BSA+0.02%NaN3	<b>Concentration</b>	100 µg/ml
<b>Host Species</b>	Rat IgG2a	<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 #								
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 1:10. It is recommended that solutions with a calcium concentration of 1 mM are used (16A8 is a calcium-dependent antibody).

- W: A non-reduced sample treatment was used.

**General Information**

**Description** Mannose Binding Lectin (MBL) also called mannose- or mannan-binding protein (MBP) is a member of the group of collectins. MBL is an oligomeric lectin that recognizes carbohydrates as mannose and N-acetylglucosamine on pathogens. MBL contains a cysteine rich, a collagen like and a carbohydrate recognition domain. It forms a complex with C1r/C1s like serine proteases designated MASPs that proteolytically cleave C4, C2 and C3. MBL is able to activate the complement pathway independent of the classical and alternative complement activation pathways. The MBL-MASP pathway (better known as the lectin pathway) is antibody and C1q-independent. MBL exhibits complement-dependent antibacterial activity and acts directly as an opsonic and therefore plays an important role in innate immunity. MBL is synthesized by hepatocytes and has been isolated from the liver or serum of several vertebrate species. Only one form of human MBL has been characterized, while two forms are found in rhesus monkeys, rabbits, rats and mice. The mouse forms are known as MBL-A and MBL-C. The MBL-C concentrations in serum are about 6-fold compared to that of MBL-A. MBL-A, but not MBL-C was found to be an acute phase protein in casein and LPS-injection models. MBL-C exists in higher oligomeric forms than MBL-A. The monoclonal antibody 16A8 is a calcium-dependent antibody.

**Aliases** MBL, L-MB, MBL-C, MBP-C, Mb12

- References**
1. Liu, H et al; Characterization and Quantification of Mouse Mannan-Binding Lectins (MBL-A and MBL-C) and Study of Acute Phase Responses. Scand J Immunol 2001, 53: 489
  2. Sastry, K et al; Molecular characterization of the mouse mannose-binding proteins. The mannose-binding protein A but not C is an acute phase reactant. J Immunol 1991, 147: 692

**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  
Brenda Teunissen

Date  
12/11/2019

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