

PRODUCT SPECIFICATION



HYB 131-01B Anti MBL (human), biotinylated *Mouse monoclonal antibody*

OVERVIEW	Article No.	102337		
	Product Name	HYB 131-01B Anti MBL (human), biotinylated		
	Clone ID	3B6		
	Subclass	IgG1 / Kappa		
	Specificity	HYB 131-01B Anti-MBL (human), biotinylated is specific for MBL from human serum or plasma.		
	Species Reactivity	Human		
	Epitope Specificity	The epitope specificity differs from that of HYB 131-10 and HYB 131-11.		
	Immunogen	MBL purified from human donor plasma.		
	Fusion Partner	X63-Ag8.653.		
	Culture Medium	Dulbecco's modified Eagle's medium with 10 % fetal calf serum		
TESTED APPLICATION	Method	Usability	References	
	Enzyme linked immunosorbent assay (ELISA)	Yes	In house analysis, 1	
PRODUCT SPECIFIC INFORMATION	HYB 131-01B, biotinylated is selective for detection of normally oligomerized MBL in a sandwich ELISA using HYB 131-01 as catching antibody (1).			
PROPERTIES	Conjugation:	Biotinylated		
	Form	Liquid		
	Preparation:	Protein A		
	Concentration:	1 mg/mL \pm 10%, based on A280. See Certificate of Analysis for details.		
	Solvent:	PBS, pH 7.2 – 7.4		
	Storage information:	Store at 2 - 8 °C.		

SSI Antibodies

Statens Serum Institut, 5 Artillerivej, DK-2300 Copenhagen S, Denmark

E ssi-antibodies@ssi.dk | W <https://antibodies.ssi.dk/> | CVR/VAT DK-46837428

PRODUCT SPECIFICATION



TARGET	<p>Mannan-binding lectin (MBL), also called mannose-binding lectin or protein, is a C-type lectin and an important component in innate immunity. MBL is an oligomer i.e. forming dimers to hexamers of homotrimeric subunits of approximately 26 kDa polypeptides. This oligomerisation is essential for functional activity (2).</p> <p>MBL forms a non-covalent complex with specific MBL-associated serine proteases (MASPs), termed MASP-1, -2, and -3. Upon binding to the surface of a pathogen, MASP-activation is initiated with subsequent complement activation and clearance through lysis or phagocytosis (3).</p> <p>MBL-deficiency is the most common immune defect resulting in susceptibility to severe infections in early childhood, or if immuno-suppressed (4). MBL-deficiency has also been associated with several clinical disorders, e.g. autoimmune diseases, endocarditis, and septicaemia (4, 5).</p> <p>Normal levels of oligomeric MBL in serum are 1 – 5 µg/mL whereas MBL-deficient serum levels are < 100 ng/mL, when estimated by a standard ELISA for MBL quantification (2). Due to the presence of different structural and promotor alleles 12 % or more of the Caucasian population have low concentrations (< 50 ng/mL) of normally oligomerized, functional MBL in plasma or serum (6).</p>
REFERENCES	<ol style="list-style-type: none">1) Laursen I, Houen G, Højrup P, Brouwer N et al. (2007) Second-generation nanofiltered plasma-derived mannan-binding lectin product: Process and characteristics. Vox Sang., 92(4), 338-350.2) Laursen I, Højrup P, Houen G, Christiansen M. (2008) Characterization of the 1st SSI purified MBL standard. Clin Chim Acta, 395(1-2), 159-161.3) Dommett RM, Klein N, Turner MW. (2006) Mannose-binding lectin in innate immunity: past, present and future. Tissue Antigens, 68(3):193-209.4) Kilpatrick DC. (2002) Mannan-binding lectin: clinical significance and applications. Biochim Biophys Acta, 1572(2-3): 401-413.5) Tran CT, Kjeldsen K, Haunsø S, Høiby N et al. (2007) Mannan-binding lectin is a determinant of survival in infective endocarditis. Clin Exp Immunol, 148(1): 101-105.6) Steffensen R, Thiel S, Varming K, Jersild C, Jensenius JC (2000) Detection of structural gene mutations and promoter polymorphisms in the mannan-binding lectin (MBL) gene by polymerase chain reaction with sequence-specific primers. J Immunol Methods 241:33-42.

Version 3 -August 2021

Conditions

For research use only. Not for use in diagnostic procedures. Not for therapeutic use or applications.

The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The foregoing is in lieu of all warranties, expressed or implied, including implied warranties of merchantability and fitness for a particular purpose. In no event shall Statens Serum Institut be responsible for loss of profits or indirect consequential losses resulting from use of its products. The animals from which this product was derived have not been exposed to or inoculated with any livestock or poultry disease agents exotic to the United States or Western Europe, and did not originate from facilities where work with exotic disease agents affecting livestock or avian species is carried out.

SSI Antibodies

Statens Serum Institut, 5 Artillerivej, DK-2300 Copenhagen S, Denmark

E ssi-antibodies@ssi.dk | W <https://antibodies.ssi.dk/> | CVR/VAT DK-46837428