ANTIBODYSHOP®

PRODUCT SPECIFICATION

06/04/2015

Anti-MBL (human)

Mouse monoclonal antibody

Subclass: IgG1/k

CAT. NO. **HYB 131-01**

Clone:3B6

SPECIFICITY	HYB 131-01 is specific for MBL (mannan-binding lectin) from human serum or plasma.
IMMUNOGEN	MBL purified from human donor plasma
TESTED APPLICATIONS	ELISA, WB, IHC-P, IHC-F
SPECIES REACTIVITY (POSITIVE)	Human
SPECIES REACTIVITY (NEGATIVE)	Not determined
EPITOPE SPECIFICITY	The epitope is on the head-neck region of the MBL protein chain. Prior binding of the antibody is thought to block binding to carbohydrate. The epitope differs from that of HYB 131-10 and HYB 131-11.

PRESENTATION

Content:	Available in 200 µL and 1 mL size.1 mg/mL +/- 15%. See Certificate of Analysis for details.
Preparation:	Protein-A purified
Form:	Liquid
Solvent:	0.01 M phosphate buffer, pH 7.4, containing 0.5 M NaCl and 15 mM sodium azide
Storage:	4-8ºC without exposure to light. No precautions necessary during handling.

APPLICATION

ELISA: HYB 131-01 is selective for normally oligomerized MBL when used as detection antibody in sandwich ELISA with HYB 131-01 coat (1). HYB 131-01 can also be used in a manan assay, when coating with manan and using HYB 131-01B as the biotinylated detection antibody(2).
WB: In Western blotting, HYB 131-01 reacts with human MBL in both its oligomerized state and as single protein chain of 26 kDa. A dilution guideline of 1/1000 has proved successful (2).
IHC: HYB 131-01 is also well suited for immunohistochemistry on human tissue samples, frozen or paraffin embedded, from (3, 4). Please consult www.proteinatlas.org

TARGET

Mannan-binding lectin (MBL), also called mannose-binding lectin or protein, belongs to the C-type family of collectins, showing calcium-dependent binding to certain sugars. It consists of oligomers of triple-chain subunits and its binding and complement activating activities depend on its normal oligomerization. On binding to mannan-like microbial surface carbohydrates, MBL activates the complement system by means of its own lectin pathway, dependent on the MBL-associated serine proteases (MASPs). Because of the presence of different structural and promoter alleles in the population, 12% or more of the population have low concentrations (<50ng/mL) of normally oligomerized, functional MBL in plasma or serum.

REFERENCES

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4. Hornum M, Bay JT, Clausen P, Melchior Hansen J, Mathiesen ER, Feldt-Rasmussen B et al. High levels of mannose-binding lectin are associated with lower pulse wave velocity in uraemic patients. B M C Nephrology. 2014;15:162.
5. Nisihara M, Magrini F, Mocelin V, Messias-Reason IJ (2013) Deposition of the lectin pathway of complement in renal biopsies of lupus nephritis patients. Hum.Immunol. 74: 907-910

CONDITIONS

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