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 various vertebrate species.

Species
Mouse IgG

Formulation
1 ml (100 µg/ml) 0.2 µm filtered antibody solution in PBS, containing 0.1% bovine serum albumin.

Application
The monoclonal antibody 3E7 can be used for blocking the complement-activating capacity of human MBL. The antibody 3E7 is useful for Western blotting and immuno assays. Furthermore the monoclonal antibody 3E7 is useful for immunohistology on frozen sections and flow cytometry. The antibody is not useful for staining of paraffin embedded sections.

Use
For Western blotting, flow cytometry and immunohistology 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. For neutralization of biological activity dilutions have to be made according to the amounts MBL to be inactivated.

Storage and stability
Product should be stored at 4°C. Under recommended storage conditions, product is stable for 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.

References
1. Muto, S et al; Biological activities of human mannose-binding lectin bound to two different ligand sugar structures, Lewis A and Lewis B antigens and high-mannose type oligosaccharides. Biochimica et Biophysica Acta 2001, 1527: 39

Also available
HM2061F FITC conjugated monoclonal antibody against Human MBL, clone 3E7
HM2081 Monoclonal antibody against Human MBL, clone D8.18
HM2082 Biotinylated monoclonal antibody against Human MBL, clone D8.18
HM2089 Monoclonal antibody against Human H-ficolin, clone 4H5
HM2090 Monoclonal antibody against Human L-ficolin/P35, clone GN4