

**MONOCLONAL ANTIBODY TO
HUMAN MBL
clone 3E7**



Catalog nr	HM2061 (lot number and expiry date are indicated on the label)										
Description	<p>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.</p> <p>MBL is synthesized by hepatocytes and has been isolated from the liver or serum of various vertebrate species.</p>										
Species	Mouse IgG ₁										
Formulation	1 ml (100 µg/ml) 0.2 µm filtered antibody solution in PBS, containing 0.1% bovine serum albumin and 0.02% sodium azide.										
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 <u>not</u> 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	<ol style="list-style-type: none">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. <i>Biochimica et Biophysica Acta</i> 2001, <i>1527</i>: 392. Matsushita, M et al; Human mannose-binding protein is identical to a component of Ra-reactive factor. <i>Biochem Biophys Res Commun</i> 1992, <i>183</i>: 6453. Hisano, S et al; Mesangial IgA2 deposits and lectin pathway-mediated complement activation in IgA glomerulonephritis. <i>Am J Kidney Dis</i> 2001, <i>38</i>: 10824. Vries de, B et al; The mannose-binding lectin-pathway is involved in complement activation in the course of renal ischemia-reperfusion injury. <i>Am J Pathol</i> 2004, <i>165</i>: 16775. Nauta, A et al; Mannose-binding lectin engagement with late apoptotic and necrotic cells. <i>Eur J Immunol</i> 2003, <i>33</i>: 28536. Nauta, A et al; Opsonization with C1q and Mannose-binding lectin targets apoptotic cells to dendritic cells. <i>J Immunol</i> 2004, <i>173</i>: 3044										
Also available	<table><tr><td>HM2061F</td><td>FITC conjugated monoclonal antibody against Human MBL, clone 3E7</td></tr><tr><td>HM2081</td><td>Monoclonal antibody against Human MBL, clone D8.18</td></tr><tr><td>HM2082</td><td>Biotinylated monoclonal antibody against Human MBL, clone D8.18</td></tr><tr><td>HM2089</td><td>Monoclonal antibody against Human H-ficolin, clone 4H5</td></tr><tr><td>HM2090</td><td>Monoclonal antibody against Human L-ficolin/P35, clone GN4</td></tr></table>	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
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