

**MONOCLONAL ANTIBODY TO
HUMAN FACTOR B/Bb
clone M13/12**



Catalog nr	HM2256 (lot number and expiry date are indicated on the label)										
Description	<p>The monoclonal antibody M13/12 recognizes human complement factor B/Bb. Factor B is an acute-phase protein. Levels of factor B increase during inflammation. Complement factor B is a single-chain molecule of 764 amino acids (MW of 90 kD), including a leader peptide of 25 amino acids. Factor B provides the catalytic subunit of the C3/C5 convertases of the alternative complement pathway. Assembly of the C3 convertase (C3bBb) requires binding of factor B to C3b (C3.H₂O) and factor D-mediated cleavage of bound factor B resulting in the release of Ba (MW 33 kD). The C3 convertase is stabilized by the binding of properdin. This provides a positive amplification loop for the classical and alternative complement pathways. Bb (MW 60 kD) is the serine protease element of this convertase. After cleavage of C3, the C5 convertase ((C3b)₂Bb) is formed. The Bb fragment may be regarded as a better indicator of the alternative pathway of complement activation than Ba as impaired renal filtration does directly influence Ba levels. Whereas Bb is elevated 2.2-fold in chronic renal failure (CRF) patients, plasma concentrations of Ba are 8.4-fold higher in CRF and 16-fold higher in end-stage renal disease (ESRD) patients compared to normals.</p> <p>In addition to complement activation, factor B fragments participate in other immunological functions.</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 M13/12 can be used as detector in immunoassay and for Western blotting. Furthermore, the antibody can be used for immuno precipitation.										
Use	For Western blotting 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.										
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. Oppermann, M et al; Complement in patients with renal failure as detected through the quantitation of fragments of the complement proteins C3, C5 and factor B. <i>Klin Wochenschr</i> 1988, 66: 8572. Oppermann, M et al; Quantitation of components of the alternative pathway of complement (APC) by enzyme-linked immunosorbent assays. <i>J Immunol Methods</i> 1990, 133: 1813. Oppermann, M et al; Elevated plasma levels of the immunosuppressive complement fragment Ba in renal failure. <i>Kidney Int</i> 1991, 40: 939										
Also available	<table><tr><td>HM2254</td><td>Monoclonal antibody against Human Complement Factor B/Ba, clone P221/15</td></tr><tr><td>HM2255</td><td>Monoclonal antibody against Human Complement Factor B/Ba, clone M20/6</td></tr><tr><td>HM2248</td><td>Monoclonal antibody against Human Complement Factor H, clone C18/3</td></tr><tr><td>HM2258</td><td>Monoclonal antibody against Human Complement Factor D, clone D10/4</td></tr><tr><td>HM2259</td><td>Monoclonal antibody against Human Complement Factor D, clone I8/1</td></tr></table>	HM2254	Monoclonal antibody against Human Complement Factor B/Ba, clone P221/15	HM2255	Monoclonal antibody against Human Complement Factor B/Ba, clone M20/6	HM2248	Monoclonal antibody against Human Complement Factor H, clone C18/3	HM2258	Monoclonal antibody against Human Complement Factor D, clone D10/4	HM2259	Monoclonal antibody against Human Complement Factor D, clone I8/1
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