MONOClonal antibody to human C3d clone 3

Catalog nr HM2198 (lot number and expiry date are indicated on the label)

Description The monoclonal antibody 3 (also known as YB2/39-11-1-7) reacts with a linear determinant in C3d. This ‘D’ antigen is found on C3, C3b, iC3b, C3dg and C3d. The complement system is an important factor in innate immunity. The third complement component, C3, is central to the classical, alternative and lectin pathways of complement activation. Activation products of the complement cascade contain neo-epitopes that are not present in the individual native components. The synthesis of C3 is tissue-specific and is modulated in response to a variety of stimulatory agents. C3 is the most abundant protein of the complement system with serum protein levels of about 1.3 mg/ml. An inherited deficiency of C3 predisposes the person to frequent bacterial infections. C3 fragments are deposited in tissues at sites of antibody-mediated immunopathology. In ulcerative colitis and idiopathic chronic inflammatory bowel disease, the deposition of C3 in the diseased mucosa has been reported.

Proteolysis by C3-convertases results in the cleavage of C3 into C3a and C3b. C3b becomes attached to immune complexes and is further cleaved into iC3b and C3f. iC3b is further processed into C3c and C3dg. C3dg can be cleaved into C3d and C3g, though this does not occur in plasma. The monoclonal antibody 3 recognizes C3, C3b, iC3b, C3dg and C3d. The monoclonal antibody does not recognize C3c. To distinguish C3 from C3b an anti-C3a antibody is necessary (HM2074).

Species Rat IgG2a

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 3 can be used for immuno assays and for immuno precipitation.

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 with the use of or derivation of this product.


Also available HM2072 Monoclonal antibody against Human C3/C3b, clone 755 HM2073 Monoclonal antibody against Human C3/C3a, clone 474 HM2074 Monoclonal antibody against Human C3a/C3a des-Arg (neo-epitope), clone 2991 HM2075 Monoclonal antibody against Human C3/C3a (C-terminus), clone 2898 HM2168 Monoclonal antibody against Human activated C3, clone bH6 HM2199 Monoclonal antibody against Human C3g, clone 9