Complement Research
Functional Tools

Hycult® Biotech

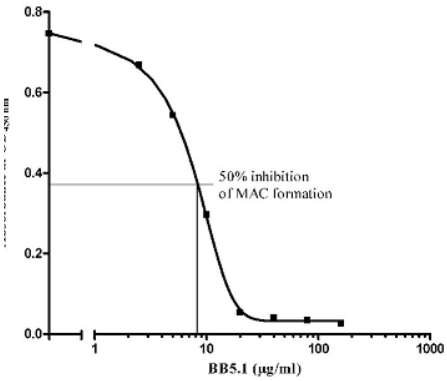
bringing innate immunity to the **next level**

Complement Research: Functional Tools

Hycult Biotech offers several products which can be used for functional studies (FS). The products below are a few of the best sellers for functional research on complement. All our antibodies are endotoxin low and available in various sizes ranging from regular 100 µg to larger quantities starting from 0.5 mg to mg bulk amounts.

C5, Mouse, mAb BB5.1 (Cat.# HM1073)

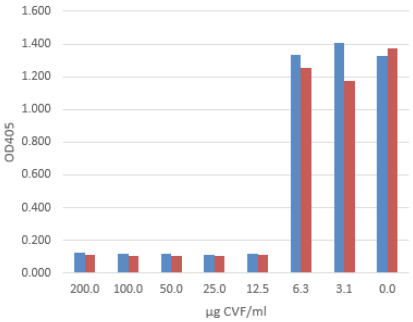
The monoclonal antibody BB5.1 binds C5. Blocking C5 may be required for optimal inhibition of the inflammatory response. Inhibition of the complement cascade at C5 does not impair the generation of C3b through the classical and alternative pathways, preserving C3b-mediated opsonization of pathogenic microorganisms as well as opsonization and solubilization of immune complexes.



HM1073 inhibits membrane attack complex formation as determined using an anti-C9 polyclonal antibody.

Cobra Venom Factor, Recombinant (Cat.# HC4073)

HC4073 is the recombinant form of Cobra venom factor (CVF). It is the non-toxic complement activating protein in the venom from the cobra species Naja Kaouthia. CVF is a structural and functional analog of complement C3 and functionally resembles C3b and exhibits a three-chain structure like C3c. CVF is used in order to deplete samples to study complement in host defense, immune response and disease.



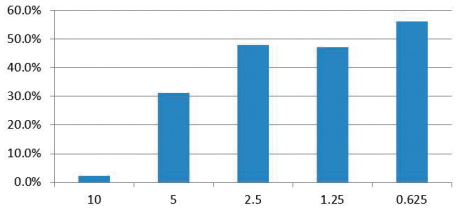
Recombinant CVF (HC4073) in different concentrations in a sheep erythrocytes experiment. Blue is the control recombinant CVF from Dr. Vogel), red is HC4073.

C1q, Mouse, mAb JL-1 (Cat.# HM1096)

JL-1 recognizes the collagen-like region (CLR) of mouse, human and rat C1q: the same region to which autoantibodies in mice and humans are binding. The antibody was administered to mice resulting in depletion of circulating C1q, glomerular deposition of C1q and induction of anti-C1q autoantibodies in susceptible mice.

C3b/iC3b, Human, mAb 3E7 (Cat.# HM2286)

3E7 recognizes human complement C3b/iC3b and blocks activation of the alternative pathway (AP). It competes with factor B and H for binding to C3b-opsonized substrates. The use of 3E7 has been shown to enhance the immunotherapeutic action of Rituximab.



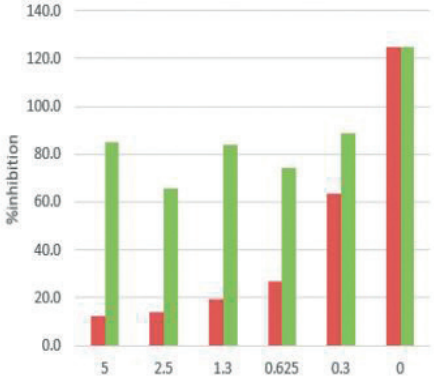
Different concentrations (µg/ml) of HM2286 block lysis of rabbit erythrocytes via the alternative pathway.

TCC, Human, mAb aE11 (Cat.# HM2167)

aE11 reacts with a C9 neoantigen of the terminal complement complex (TCC). The formation of TCC causes lysis of cells or can trigger a variety of cellular metabolic pathways resulting in the synthesis and release of inflammatory mediators. The TCC contains neoantigens that are absent from the individual native components. C9 neoantigens are present both in the membrane-bound (MAC) and the fluid-phase (SC5b-9) complex.

Properdin, Human, mAb 3A3E1 (Cat.# HM2355)

3A3E1 recognizes human properdin, also called complement factor P, a positive regulator plasma protein critical for the alternative pathway of complement. The antibody is suitable for inhibition of the alternative pathway of complement.



Inhibition of the alternative complement pathway tested with HM2354 as a control for not inhibiting and HM2355 as an inhibition antibody. Different concentrations have been tested (0 – 5 µg/ml).

Looking for other antibodies with functional properties?
Have a look at our website www.hycultbiotech.com or request more information via support@hycultbiotech.com.