Anti-Human Factor B

For Research Use Only. Not for use in diagnostic procedures

Background
Primarily synthesized in the liver, Factor B is a plasma protein that is unique to the alternative pathway of the Complement system. The average concentration of Factor B in human serum/plasma is approximately 200 µg/mL. Factor B present in the circulatory system is a single-chain polypeptide with a molecular weight of 93 KD. Factor B will bind to the C3b component of the complement system in the presence of Mg ++ to form the C3bB complex. This complex can be activated through cleavage of the Factor B portion by Factor D, which releases the Ba fragment of Factor B while the Bb fragment of Factor B remains bound to C3b. The C3bBb complex acts as a C3 and C5 convertase due to the serine protease activity of the Bb fragment. Presence of the split products (Ba and Bb fragments of Factor B) indicate that the alternative complement pathway has been activated. Factor B, like C2 and C4 is characterized as a Class III major histocompatibility complex (MHC) antigen. The structural gene coding for this protein is located within the MHC on chromosome 6 in man, and chromosome 17 in mice.

Characterization
Highly purified human Factor B was isolated from normal serum and used to immunize goats. The Anti-Human Factor B polyclonal antisera was tested by double-immunodiffusion, one-dimensional immunoelectrophoresis, quantitative radial immunodiffusion, and quantitative rocket immunoelectrophoresis. The antisera was determined to be monospecific for the Factor B protein.

Applications
Applications of the Factor B polyclonal antisera have been evaluated by various research facilities, and include Western Blot, IHC, Immunoprecipitation, and Immunofluorescence.

Specifications
- Volume/vial: 2.0 mL
- Storage: 2°C to 8°C* (≤ 30 days)
- Form: Whole Antiserum
- Preservative: ≤ 0.1% Sodium Azide

Species Cross Reactivity:
- Baboon, Horse, Dog, Cat, Rabbit, Hamster, Mouse, Rat, Guinea Pig, Swine

References

*For long-term storage (> 30 days), aliquot and store at ≤ –20°C. Avoid repeated freeze-thaw.