COMPLEMENT FACTOR B, HUMAN

Product No. C 4909
Store below 0°C

Factor B is a heat labile 2-globulin with a single polypeptide chain. Serum concentration is 200-250 µg/ml. Factor B is polymorphic as judged by electrophoretic mobility. It plays an important role in the alternative pathway of complement activation. Factor B can be activated and cleaved into factor Ba and Bb with factor D in the presence of either factor C3b or cobra venom. Bb is the catalytic subunit of alternative pathway C3 convertase and C5 convertase. The activity of factor B can be assayed by the method of Borsos using EAC4,3 cells, by the method of Martin using hemolytic diffusion plate or by the method of Thomas using factor B deficient serum and rabbit erythrocytes. The isolated factor B will give a concentration-dependent cell lysis.

Storage/Stability
Store lyophilized powder below 0°C. Store at -70°C after reconstitution with distilled water. Repeated freezing and thawing is not recommended.

Product Profile
Protein: Determined by method of Lowry.
Form: Lyophilized from a solution containing 0.05 M Tris, 0.02 M NaCl, 0.01 M EDTA and 0.01 M α-aminocaproic acid, pH 7.5
Approx. molecular weight: 90,000
Isoelectric point: 6.5
Purity: Single arc as determined by immunoelectrophoresis at 20 µg protein per gel against both anti-B serum and anti-whole serum.
Activity: Functionally active as assayed by modified method of Thomas using factor B deficient serum. Alternative pathway activity can be fully restored by adding purified factor B at physiological concentration (200-250 µg/ml).

References
1. Shiraish, S., et al., Immunochemistry, 12, 935 (1975)
7. Curman, B. et al., Biochemistry, 16, 24 (1977)