PLASMA FIBRINOGEN DETERMINATION
(Heat Precipitation Method)

Required materials: Microhematocrit centrifuge
Temperature compensated refractometer with protein scale
Heat block or water bath set at 58° C
Plain microhematocrit tubes
Microhematocrit sealant
Timer

1. Fill two microhematocrit tubes with freshly drawn and anticoagulated (Heparin or EDTA) whole blood and centrifuge as for measurement of the microhematocrit.

2. Break the first tube just above the RBC/plasma interface. Dispense the plasma onto the prism of the refractometer. Read and record the plasma protein concentration (g%).

3. Incubate the second tube for 3 minutes in the 58° water bath or in a test tube containing water that has been pre-incubated to 58° in the dry bath. The fibrinogen will precipitate as a white ring above the RBC.

4. At the completion of the 3-minute incubation, re-centrifuge the second tube. Break the tube just above the plasma/fibrinogen interface. Measure the protein concentration of the remaining plasma.

5. The fibrinogen concentration will be the difference in the total protein measurement of the first microhematocrit tube vs. the incubated and recentrifuged second microhematocrit tube. Subtract the total protein value in g/dl of the second tube from that of the first tube. Multiply the result times 1000 to obtain the fibrinogen measurement in mg/dl.

References: Schalm, O.W.: Manual of Feline and Canine Hematology; p.152. Veterinary Practice Publishing Company; Santa Barbara, CA. 1980